



### **Introduction by CIC's Japan Desk**

The Massachusetts Institute of Technology, more commonly referred to as MIT, is considered to be one of Massachusetts's prized academic institutions, while also consistently ranking high in both national and international ranking surveys of universities. Incorporated in 1861, MIT was created under the motto *mens et manus*, meaning mind and hand. The idea was to create an academic institution which fused both the scientific and practical forms of education at the time, combining "theory and practice into a coherent program of study within a single institution."

MIT claimed many firsts for academic institutions of the 19th century while also bucking the trends of the time by admitting international students as early as their 2nd year as an accredited university. Eventually it expanded until a small change of location was necessary. The main body of their campus was relocated across the Charles River to Cambridge in 1916, where it remains to this day. In the 21st century, MIT has continued to shape Kendall Square, helping Kendall Square earn the reputation as "the most innovative square mile on the planet." MIT prides itself on its ability to cultivate innovation through its various programs and essential ties to the local entrepreneurial ecosystem. This dedication to the local community has extended to curious minds from abroad, Japan without exception.

In order to get insight into the wide variety of programs that they offer, and how MIT interacts with Japan, we spoke with Ryo Ishibashi, Program Director of MIT ILP within their Office of Corporate Relations. Below, Ryo has been kind enough to share his myriad insights as someone at MIT who is uniquely connected to each of those points.

-

<sup>&</sup>lt;sup>1</sup> https://mitadmissions.org/discover/about-mit/a-brief-history-of-mit/



Ryo Ishibashi Program Director, MIT, Office of Corporate Relations

### Hello Ryo, could you please introduce yourself?

Good day, I'm Ryo Ishibashi. Originally from Tokyo, I have spent the majority of my life in the United States, enriched by an international upbringing due to my father's career as a roboticist. This unique exposure to diverse cultures and environments, including time in Wisconsin, Michigan, Germany, and Italy, has significantly shaped my professional outlook and approach.

My career commenced as an automotive engineer in Detroit, where I developed a foundational understanding of engineering principles and practices. Seeking to diversify my experience, I subsequently transitioned to the dynamic startup ecosystem in the San Francisco Bay Area. This venture into the startup sector was a pivotal shift, offering me invaluable insights into innovative business models and strategies. Following this, I took on a role at a family office based in Las Vegas, which included responsibilities as an expatriate in Tokyo and Singapore. These international assignments provided me with a profound understanding of global business operations and cross-cultural management.

Upon returning to the United States, I engaged in management consulting in Chicago, further broadening my expertise in business strategy and organizational development. Subsequently, I joined a Boston-based startup, serving in a key role in Tokyo. This experience was pivotal, especially during the company's significant growth phase and its transition to a public entity. Being part of the startup as it went public allowed me to experience the IPO process first-hand, which was instrumental in enhancing my skills in international business expansion, strategic planning, and understanding the complexities of taking a company public.





Currently, I am positioned in the Office of Corporate Relations at MIT. In this capacity, I leverage my extensive background in engineering, international business, and startup development to facilitate meaningful collaborations between academic research and the global business community. This role not only aligns with my diverse experiences but also offers a platform to contribute significantly to the intersection of academia and industry.

#### Could you describe your history with startup development?

In my career, I've had the opportunity to work with two startups, each providing me with distinct experiences. The first startup, although it didn't succeed, offered valuable lessons in the challenges and realities of startup development. The second one achieved a milestone by going public, which allowed me to witness and participate in an IPO and its subsequent developments, a truly unique and educational experience.

Currently, in my role at MIT's Office of Corporate Relations, I am deeply involved with startups emerging from MIT. My work primarily involves connecting these startups, many of which are founded by MIT faculty or researchers, with companies affiliated with MIT. I'm part of the Industrial Liaison Program team, which works closely with the Startup Exchange team. The Startup Exchange team manages the intake process for MIT-affiliated startups, and my role involves facilitating connections between these startups and companies within the MIT ecosystem.

A key aspect of these startups is their foundation in what we call 'deep tech.' The majority are spin-outs from fundamental and translational research incubated in MIT's labs. This focus on deep tech is part of what makes MIT a powerhouse in creating startups with profound societal impacts.

# How is MIT, as an academic institution, assisting startups in the local Boston ecosystem? What are some experiences that are unique to this academia/startup relationship?

Understanding the exact mechanisms of MIT's support to startups in the Boston ecosystem is complex, but it's clear that the institution plays a vital role. One of the key aspects is MIT's position as an academic powerhouse capable of uniting startups, industry leaders, government entities, and investors. This unique convergence is, in my view, part of the 'secret sauce' that makes MIT so influential. We act as an impartial mediator and a reliable source of scientific and technological knowledge.





Furthermore, MIT's faculty are instrumental in this process. They serve not just as academic mentors but also as entrepreneurial guides. Many of our faculty members are not only top researchers in their fields but also experienced startup founders themselves. This dual expertise allows them to provide invaluable technical and business advice to emerging startups. The experiences here are unique in the sense that startups have direct access to groundbreaking research and a network that spans various sectors. This environment fosters a symbiotic relationship where academic insights and real-world applications converge, creating a thriving ecosystem that is conducive to innovation and practical problem-solving.

### Why is it important that one of MIT's missions is creating societal impact through startup innovation?

I will reference a community letter<sup>2</sup> by former MIT President, Rafel Reif, to answer this question. In 2016, when talking about The Engine, a new accelerator launched by MIT to support startups based on cutting-edge science and technology, Reif highlighted the unique challenges these startups face. He noted that while venture capital funding is effective for startups that can reach market profitability quickly, it is less suited for breakthrough technologies based on new science and engineering, which often require more time to develop. Reif emphasized MIT's mission to not only "advance knowledge" and "educate students" but also to bring "knowledge to bear on the world's great challenges." He believed The Engine could provide a realistic pathway to the marketplace for innovators working on serious technological solutions to urgent global challenges.

## How does the triangular relationship between companies, educational institutions, and the state level government create progress?

MIT's innovation ecosystem model, which involves academia, companies, startups, and government, is a multifaceted and dynamic framework designed to foster innovation-driven entrepreneurship. This ecosystem is supported by various programs and initiatives that engage different stakeholders, including entrepreneurs, risk capital providers, universities, policymakers, and large corporations.

One of the key components of this ecosystem is the MIT Regional Entrepreneurship Acceleration Program (MIT REAP). MIT REAP translates research insights into practical frameworks and convenes stakeholders focused on innovation-driven entrepreneurship. This program educates regional innovation ecosystem leaders through team-based learning, enabling them to facilitate meaningful economic and social outcomes in their regions.<sup>3</sup> Partner regions

<sup>&</sup>lt;sup>2</sup> https://reif.mit.edu/speeches-writing/exciting-step-forward-our-innovation-ecosystem

<sup>&</sup>lt;sup>3</sup> https://reap.mit.edu/about/





form multidisciplinary teams and engage with MIT through action-learning activities to develop and implement strategies enhancing their innovation-driven entrepreneurship ecosystems.

MIT's approach to fostering innovation also includes addressing challenges and gaps in the startup support process. Efforts are made to enhance understanding of the legal aspects and boundaries for starting a company at MIT, addressing concerns about licensing rights and the complexities of incorporating a company. This is supported by mentoring and guidance from entities such as the Martin Trust Center for MIT Entrepreneurship, MIT Venture Mentoring Service, and Deshpande Center, which help navigate the startup process and provide trusted advocacy.

The MIT Startup Exchange program is another crucial element, which begins its involvement when a startup has a minimum viable product and is ready to engage with corporates. This program works in tandem with MIT ILP (Industrial Liaison Program), leveraging an extensive database of corporates from various countries and industries to provide targeted introductions for startups founded by experts from the MIT innovation ecosystem. The program also hosts a robust schedule of events, workshops, and showcases to promote networking and partnerships between startups and corporate executives.

### What are some strengths of Japanese startups that make them stand out in the global market?

In my view, the success of Japanese startups is largely due to the extensive support from government entities and a favorable fundraising environment. Key agencies like METI and JETRO provide incentives like tax breaks and financial aid, especially in strategic and disaster-impacted areas, enhancing the startup ecosystem. Local government initiatives in major cities, through support systems and innovation hubs, further aid startups in securing funding and business development.

Additionally, METI's J-Startup program plays a vital role in identifying and nurturing startups with global competitive potential, leveraging insights from venture capitalists and established businesses. Events like the Global Startup Connection: J-Startups for NET ZERO, organized by METI and JETRO, are crucial for networking and building partnerships in the international arena.

Lastly, the prowess of Japanese academia in fundamental research, known for its ability to tackle societal issues, is set to significantly boost Japan's future in generating high-value startups. The synergy between academic research and industry's practical application creates a





robust ecosystem, fostering startups that are not only technologically advanced but also highly relevant on a global scale.

# How does MIT engage with Japanese entities and how do these relationships create multinational impact?

A variety of MIT's collaboration with Japanese corporations happens through the Industrial Liaison Program (ILP). The ILP plays a crucial role in connecting these corporations with the vast research and innovation resources at MIT. It's less about a structured program and more about facilitating a bridge between the academic and corporate worlds.

Through the ILP, Japanese companies gain access to MIT's cutting-edge research, tailored to their specific business needs and challenges. This program allows for an exchange of ideas and technology, fostering a relationship that is mutually beneficial. For instance, a Japanese company interested in robotics or AI can collaborate with MIT researchers specializing in these fields, gaining insights and knowledge that are at the forefront of technological development.

Moreover, the ILP helps Japanese companies stay abreast of the latest technological trends and innovations. This is crucial, given the rapid pace of change in technology and business. By being connected to MIT's research community, these companies can anticipate and adapt to emerging trends more effectively.

Another aspect of the ILP's impact is seen in how it facilitates networking and relationship-building. Japanese corporate members can participate in various ILP events, workshops, and conferences, which are great opportunities for networking with MIT researchers and fellow industry leaders. These interactions can spark new ideas, lead to collaborative projects, or even influence the strategic direction of the companies involved.

In essence, the ILP serves as a gateway for Japanese corporations to the vast resources of MIT, aligning academic innovation with industry needs. This not only benefits the corporations in terms of gaining access to cutting-edge research and development but also contributes to the global impact of MIT's work by applying research findings in practical, industry-specific contexts.

### Are there any ways in which Japanese startups could engage with MIT?

At MIT, we offer a range of centers and resources dedicated to supporting startups, though it's important to note that specific rules and regulations may vary. For instance, our





Startup Exchange Program, managed through Corporate Relations, typically requires startup founders to have strong affiliations with MIT. This could involve a founder being an MIT graduate or a co-founder having ties to MIT faculty, among other possibilities.

Nonetheless, I strongly encourage all startups to consider becoming a part of the thriving startup ecosystem here in Cambridge, Massachusetts. Simply by being in this vibrant environment and engaging with the rich research and startup communities, entrepreneurs can often stumble upon unexpected opportunities and connections that can significantly benefit their ventures.