



Member Success Case Study

Epoch Foundation

Most organizations dream of changing the world. Start-ups and foundation leaders often cite goals of improving society, helping humankind, creating a legacy, or inspiring lasting change. In the same breath, they'll mention role models who have successfully done so, those whose footprint on a given industry is undeniable and widely felt.

One such role model could be the Epoch Foundation, a nonprofit organization that has been successfully shaping the technology industry for 31 years.

ABOUT THE EPOCH FOUNDATION

Founded in 1991 by twenty Taiwanese companies, the Epoch Foundation was created with the mission of facilitating Taiwan's industrial development and promoting regional prosperity. As President Josephine Chao tells it, the 90's were a turning point for Taiwan, with the birth of their democracy, a changing global economy, and the beginning of the World Wide Web. She says that, as a trading island, "we are very sensitive about what's going on all over the world." Therefore, Taiwanese industry leaders were quick to recognize the potential of technologies like the internet, especially when combined with their entrepreneurial culture.

"We don't have any resources. Nothing. Zero," Chao emphasizes, "and we are a small island country." Therefore, as Chao explains, Taiwan has depended on the entrepreneurship of their people and their background in engineering.

Formed under the leadership of Mr. Paul Hsu, who saw the booming technology manufacturing field as "a gold mine," the Epoch Foundation has always had strong ties to MIT. Even in the early days of the foundation, former Sloan School Dean Lester C. Thurow was heavily involved in creating an MIT-Taiwan connection. The foundation has since grown to become a powerful influence in both the Taiwanese economy and the global technology market.

When asked about the Epoch Foundation's current mission, Josephine Chao says, "We are very focused on human capital and innovation."

There are three main ways the Epoch Foundation is pursuing this mission. First, they run the Epoch School, which was created in 1998 and has since fostered more than 3,000 young leaders, many of whom come back to work for or donate to the Epoch Foundation. In a similar vein, the Epoch Foundation created Garage+, a zero-equity incubator which supports altruism-driven technology start-ups. Since beginning in 2008, Garage+ has launched more than 435 startups, including 216 international startups, and has a fundraising success rate of up to 75%.

The third way the Epoch Foundation is creating a better, more advanced world is by helping facilitate collaborations between industry and internationally renowned academia, including MIT CSAIL.

CONNECTING WITH CSAIL

The Epoch Foundation's relationship with MIT CSAIL, according to Chao, began with a napkin. About 20 years ago, Chao remembers a seminal dinner with Professor Michael Dertouzos, director of the MIT Laboratory for Computer Science which would eventually merge with the Artificial Intelligence Lab to become CSAIL. As she describes it, a group of industry leaders and faculty had gathered on a boat in the Charles River to discuss collaboration. When the MIT professors realized how quickly prototypes could be manufactured in Taiwan and how beneficial the relationship could be to both sides, they all signed their name right there on what was available to them: a paper napkin.

Since then, the Epoch Foundation's relationship with CSAIL has only grown. With the help of CSAIL Alliances, the Epoch Foundation has acted as a liaison between several Taiwanese companies and CSAIL researchers. One of these companies, Quanta Computer Inc., created a \$20 million, 5-year joint research project with MIT in 2005 called Project T-Party (later renamed Project Qmulus). Quanta Computer extended the collaboration in 2009 with another \$25 million, successfully completed a 5-year program called Omulus in 2014, formed a new smart healthcare alliance with MIT in 2019, and is currently working on another 5-year project in collaboration with CSAIL called AI Medicine, which began in 2019. Delta Electronics—also connected to MIT by the Epoch Foundation—joined the Oxygen Alliance in 2000, which aimed to develop human-centered computers devoted to serving people's needs. Delta Electronics and Quanta Computer both remain active CSAIL Alliances members thanks to the Epoch Foundation, along with Mediatek, National Taiwan University, and Wistron, which has worked with seven CSAIL PIs to develop various research programs.

Another affiliate the Epoch Foundation connected to CSAIL Alliances, the Taichung Veterans General Hospital, completed a 3-day delegation visit to the Stata Center which they described as "unforgettable." This visit has facilitated exciting new connections between Taiwanese doctors and CSAIL Professors, connections that could lead to revolutionary medical research.

In-person interaction is an important part of the Epoch Foundation's relationship with MIT, and they continually encourage their members to attend CSAIL events and organize visits to learn more about research that aligns with their interests. The Epoch Foundation itself conducts biennial trips to MIT, and their visit to CSAIL is "always a highlight," according to Project Manager Ivory Hsia.

She says, "With great support from [CSAIL Alliances], our delegation always has fruitful visits at CSAIL which further leads to research collaboration."

Josephine Chao describes it as "an adventure" every time a Taiwanese company joins forces with CSAIL researchers. However, she's careful to note that the Epoch Foundation has a realistic view of academic research. Chao says, "If research has some result, then good. But sometimes there's no immediate result… Research is not like Hollywood. There's no magic."

Because of that, the Foundation strongly believes that "we don't know the future." So even when a researcher stumbles upon something that seems "impossible to commercialize" but might still have an important contribution to society, the Foundation is glad to fund it.

Epoch Foundation

CONNECTING WITH CSAIL (continued)

A further way the Epoch Foundation finds value and inspiration from CSAIL is by taking full advantage of the resources CSAIL Alliances provides, particularly thanks to Ivory Hsia. With the help of her team, Hsia diligently reviews the CSAIL Alliances newsletter and website to collect technology updates and information on upcoming conferences, workshops, events, courses, etc. Once she and her team have made their selections, they translate the information to Chinese and release their own Epoch-CSAIL Monthly Newsletter to their member companies. In addition, if there's a specific update or research topic they think will be of use to a particular member, they will reach out individually to draw attention to it.

Because Hsia, Chao, and their team are in frequent contact with their member companies and stay connected to CSAIL research and resources, they have a deep understanding of what will be interesting to each of their contacts. This allows Epoch and their members to draw inspiration from CSAIL in a way that supports and informs their business model. Hsia provides the example of Quanta Computer, which evolved from a laptop manufacturer to a cloud service provider currently integrating into the smart medicine field, in part thanks to what they learned from MIT CSAIL.

Describing their relationship with CSAIL, Josephine Chao says, "we explore the future together."

Hsia agrees, describing the relationship between Taiwanese industry and CSAIL research as a "win-win" situation. She says, "we leverage international resources [like CSAIL] and Taiwan's industry to make it like an ecosystem for everyone to grow and evolve."

GOING FORWARD

Chao and Hsia both agree that the pandemic was a frustration for the Epoch Foundation because of their emphasis on in-person connections. But both are determined to come back stronger than ever, particularly in their association with MIT. As Chao points out, this is the perfect opportunity to "rebuild a very close relationship," especially as the founding generation begins to retire.

"Now it's the second generation," she says, hoping to "exchange more ideas [and] be more aggressive" in their efforts to connect Taiwanese companies to MIT researchers.

In that vein, she's excited to facilitate further collaborations, with a particular focus on inviting "more CSAIL professors to Taiwan to exchange ideas with the Taiwanese industry." Chao is also excited to physically visit MIT. "I miss Boston very much," she says, and hopes to bring visiting researchers to CSAIL soon.

With Chao's leadership, the Epoch Foundation is driven to improve both Taiwan and the world. By fostering fresh talent and connecting industries around the globe, the Epoch Foundation acts as the bridge between the present and future they aim to create. Currently, their focus is on healthcare, next-generation computing & AI, energy solutions, and security, although they're always on the lookout for new ideas that fit their mission.

According to Chao and Hsia, it's an inspiring space to be working in. Hsia emphasizes the pleasure of seeing the tangible fruits of their labor, both in lives changed and technology created. "We are always thinking about what we can make better," Chao agrees, and is glad to join with MIT to do so.

Recalling that very first napkin agreement, Chao says, "We'll never stop collaborating with CSAIL."

