

INVESTED IN TECHNOLOGY

VENTURE CAPITALIST AND TELECOMMUNICATIONS PIONEER **PRISCILLA LU** (PHD '80) IS ADVANCING INNOVATIONS IN CHINA'S HEALTHCARE TECHNOLOGY AND CLEAN TECH SECTORS.



As world markets began sliding toward financial crisis in 2008, Priscilla Lu sensed trouble in the air. She was adept at reading market trends, having spent five years helping make sound investments in China for the Mayfield Fund, a Silicon Valley-based venture capital firm. To ride out the coming storm, she knew she needed to redirect and spearhead new efforts in two areas with tremendous opportunities: healthcare and clean technology.

As founder, general partner, and managing director of Cathaya Capital, Lu looks back on that time as a key inflection point in her career, when she moved from more technical and operational thinking to applying financial acumen. "Despite the financial crisis, I was fortunate enough to establish the fund in the beginning of 2009," Lu remembers, noting that the European family fund that committed \$200 million in investment capital recognized the investment opportunities and growth in these sectors in China.

"We were looking at improving hospitals in China and training their staffs to utilize more advanced technologies for diagnostics and patient therapies, especially in oncology and cardiology," she says. "I felt that was an area where there was a growing need, and where the investments could make a difference in contributing to the advancement in medical care for the communities."

The clean tech sector also cried out for investment to help mitigate pollution and reduce the country's dependency on fossil fuels. Lu used her cross-border expertise and connections to help Chinese companies establish partnerships with Silicon Valley companies that had proven success in these areas.

"That was the formula, finding the right combination that would help grow the two sectors quickly and fulfill a very dire need in China for industries to address these needs," she says.

A passion for innovation, a catalyst for change

Using her capability and experience to maximize opportunity has been the secret to Lu's success. As a high school student in Hong Kong, she quickly recognized that the emerging computer science discipline offered a chance to blend her interests in mathematics, physics, and analytics.

"Computer science was just becoming mainstream as an area of concentration for studies," she remembers. "What interested me was the challenge of solving problems methodically."

After earning a BS and MS in computer science and mathematics from the University of Wisconsin, Madison, Lu joined AT&T Bell Laboratories in Naperville, Illinois, in 1976. She describes it as a major center of excellence for technology breakthroughs with a unique atmosphere that encouraged inventiveness and exploration.

“It was an extremely exciting and exhilarating environment,” she recalls. “Innovation could be quickly implemented in practical and revolutionary applications that made a huge difference in advancing various areas of technology.”

The company offered her the chance to earn a PhD from Northwestern. Lu found her job and her studies so engrossing that she spent all of her time in the lab, often working until dawn, fueled by the energy of the professors and students around her.

“When you’re interested in something, your mind just doesn’t stop,” she laughs. “There’s no need to rest because you’re not tired.”

After earning her PhD in computer science and electrical engineering, Lu thrived in the incubator environment at Bell Labs, leading efforts in digital switching and networking and developing the early technologies for microprocessors. During her 16 years there, she worked her way up to become director of the imaging and multimedia lab.

When Bell Labs spun off to become Lucent in the mid-1990s, Lu was heartbroken. Sensing that the culture would change, she decided to go to Silicon Valley and try her hand there. She says one of the keys to her success has been to step out of her comfort zone and embrace change. “I felt the only way I could continue that creative innovation was to be in Silicon Valley in an environment similar to Bell Labs, but in a more unstructured way—not in a corporation, but in a community,” she says.

Embracing challenges and transformation

Relying on her telecommunications expertise, Lu decided to launch interWAVE Communications in 1994, a startup providing mobile networks in developing countries. As the founder, chairman, and CEO Lu felt proud; not many women were starting technology companies at the time.

Building cellular networks in countries with rugged terrain, primarily in Africa and where most people didn’t have traditional phones, let alone cellular technology, proved tricky but rewarding. Lu found the challenge invigorating and was pleased at its positive effect on the economic development of local businesses.

“Those markets were ready for wireless cellular networks,” she remembers. “The growing businesses in those countries all needed phones, and it was easier to deploy wireless telephones and avoid the burden of laying out wires and conduits.”

Securing funding from Mayfield and Morgan Stanley Ventures, Lu built interWAVE from the ground up. The company went public in its sixth year, achieving multi-billion dollar market capitalization and delivering more than 160 networks throughout Africa and the Middle East.

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“Even as CEO of my company, I continued to pursue technical innovation, with more than 20 patents in cellular networking,” she says. “Often engineers think that by becoming a manager or becoming more focused on the financial side of the business, the technical innovation stops, but that’s not true.”

Eye on investing

After 10 years of success with interWAVE, Lu craved a new challenge. In 2003, she became an adviser to Mayfield Fund and helped found the Golden Sands River Venture, a venture capital fund overseeing more than \$1 billion in investments in China. With the expertise she gained there, she was able to launch Cathaya Capital in 2009. Using her experience in high-tech investment and her operational experience as a CEO, she then joined Deutsche Bank and established the new Sustainable Investment group for Asia.

She is now general manager and regional officer for asset management for the region, where she focuses on investments in clean energy and environment-related companies.

Shifting her focus from developing and disseminating new technologies to funding the companies creating the next tech breakthroughs was a natural progression for Lu. Her experience running her own startup gives her insight to identify teams and companies with potential and the operational know-how for successful business models and partnerships.

“If they are missing certain elements in the team dynamics, or if they need significant partnerships to meet their target objectives, mission, and vision, I can help them develop that and guide them on adopting sound business models and operational plans,” she says.

Lu says that at Northwestern, she learned the value of strong interdisciplinary partnerships and the curiosity to pursue information beyond her knowledge base, and developed the belief that learning never stops, which is why she serves on the McCormick Advisory Council. She hopes to impart this continuing pursuit for knowledge to young engineers.

“Northwestern taught me how to go beyond what you already know and still feel comfortable, knowing that the more you learn, the more you can benefit and expand your abilities.”