

3DNest Inc.

3DNest (Zhongqu [Beijing] Technology Co., Ltd.), a Chinese company that manufactures and sells 3D VR cameras and offers 3D image scanning services, founded a subsidiary in February 2018 in Tsukuba, Ibaraki to penetrate into the Japanese market. The company has developed an original 3D scanning camera that not only takes 360-degree spatial photos instantly but also captures spatial data in real time. This technology gives 3DNest the advantage of being able to reconstruct instant, low-cost and realistic spatial models in 3D VR. We interviewed Xianhe Zhang, CEO of 3DNest Inc. (the company's Japanese subsidiary), on the background of establishing the Japanese office and future business prospects.

3D VR spatial models generated instantaneously at low cost

Founded in Beijing in 2014, 3DNest manufactures and sells 3D VR cameras that can take 360-degree spatial photos, offers image scanning services and creates 3D VR models. Data obtained from 3DNest's scanning cameras is automatically processed by the company's own cloud-based software and then uploaded online to be shared immediately as 3D VR models.

While there is also a manufacturer of 3D VR cameras in the United States, 3DNest not only sells cameras but also positions 3D VR image scanning services as its main business, developing products and offering services customized to the needs of clients such as in the real estate industry. Although computer graphics can also create 3D VR models, it requires manual work by engineers, which costs time and money. In comparison, 3DNest's technology can automatically create 3D models through the company's cloud platform, processing the scanned data captured by a 3D scan camera, efficiently and at low-cost. Traditional technologies, on average, need three or four days and at least one million yen to scan the space of a 100 m² room and create 3D VR models. 3DNest's technology, meanwhile, can do it within four hours and at only about 30,000 yen.

Maximizing this groundbreaking technology, the company has developed its services and expanded from its Beijing headquarters across mainland China. As customers can experience immersive virtual views of floor plans and interiors in 3D VR online, 3DNest's diverse customer base includes real estate companies seeking to implement efficient property searches, hotel and private lodging operators



Example of a 3D VR model created by 3DNest (for real estate)

aiming to offer services in which customers can view rooms in advance and art museums that want to display virtual items online. 3DNest's customer list includes global companies such as Intel and IKEA, Huazhu Group Limited (a major Chinese real estate company) and Alibaba Group Holding Limited, which operates EC sites (Taobao.com, a C2C site, and Tmall.com, a B2C site). When 3DNest was founded, it had five employees, but now it has grown to as many as 50 engineers in Beijing. In 2017, it founded a local subsidiary in Singapore.

Setting up a business base in Tsukuba to recruit technical talent

In February 2018, 3DNest founded 3DNest Inc., its Japanese subsidiary, in Tsukuba, Ibaraki. The company chose this location because office rent is lower than in Tokyo and excellent talent can be easily recruited from the University of Tsukuba. The shared office the company entered is located next to the campus, and it employs one University of Tsukuba graduate, an international student from China with a technology background. Mr. Zhang also came to Japan as an international student 10 years ago, and is familiar not only with the language but also the culture. He now heads the Japanese subsidiary.

Mr. Zhang said that 3DNest decided to enter the Japanese market because of the presence of global companies, its developed infrastructure and the increase in inbound tourism that has resulted in a higher demand for 3DNest's technology from the real estate and hotel industries. "When we thought about going overseas, we thought we should enter the Japanese market because Japan is a gateway to the global market," he said. To expand their business in Japan, 3DNest established a business base in Tokyo and plans to add an Osaka office by the end of February 2019.

**Development of customers after winning entrepreneurship contest**

Mr. Zhang said that the most challenging experience in Japan was having to perform sales activities with few personal connections. In July, 2018, however, 3DNest Inc. won the Grand Prize of the Foreign Entrepreneurs Business Plan Competition hosted by the Tokyo

Star Bank, Limited. Mr. Zhang said, "We applied for the competition to build personal connections in Japan, but, to our surprise, wound up winning and were given the opportunity to appear on TV. The Tokyo Star Bank gave us prize money and introduced us to multiple Japanese companies with the potential need for our technology. It was a big help." After the win, multiple companies started contacting 3DNest Inc. looking for the possibility of incorporating its technology, and business discussions are ongoing.

There is currently a Chinese-affiliated real estate company in Japan attempting to differentiate itself from competitors by using 3DNest's technology to allow investors in China to view properties in Japan in 3D online without having to travel to the country. 3DNest Inc. has also recently received inquiries from hospitals, schools and restaurants in Japan wanting to advertise their facilities online, and there is great demand from private lodging businesses in the Kansai area.

A desire to change people's lives through 3DNest's technology

In China, many companies across various industries, such as real estate firms, private lodging facilities, art museums, factories and EC sites, have begun using 3DNest's 3D VR technology. Mr. Zhang said that he sought to build connections among companies and make people's lives better through this technology. Ongoing projects in China include 3D models of sightseeing spots, online 3D "open campus" tours of schools and 3D factory tours meant to give background to the products they make. Mr. Zhang said, "If 3D VR technology were used in Japan for sales and leasing of condominiums, it would change the way properties are viewed from now on."

He continued, "As of now, 3DNest Inc. conducts business in Japan by importing cameras developed and manufactured in China,

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but we want to further localize our technology for the Japanese market. To do this, we are eager to recruit people to be engaged in product development.”

JETRO's support

To assist with the establishment of the company's base in Japan, the JETRO Investment Business Support Center (IBSC) provided temporary office space and referred local service providers (tax accountants, certified legal specialists for visa applications and banks).

Mr. Zhang said, “We received various assistance including for registration procedures and through introduction of banks. JETRO's temporary office space, and introduction to a permanent office afterward, were especially helpful. As we didn't know much about the organization at first, to be honest we were not expecting such thorough support. We are enormously thankful that we came across

JETRO. I am hopeful that it will continue to set up opportunities for us to meet Japanese companies.” He concluded by saying, “We would sincerely like Japanese companies to make the most of our business model, which has been very successful in China.”

(Interviewed August 2018)



(Mr. Zhang, CEO of 3DNest Inc., beside one of the company's 3D scanning cameras)

Company history

April	2014	Establishment of 3DNest (Zhongqu (Beijing) Technology Co., Ltd. in Beijing, China
February	2018	Establishment of 3DNest Inc. in Tsukuba, Ibaraki
July	2018	Establishment of 3DNest Inc. in Tokyo

3DNest Inc.

Establishment:	February 2018
Business overview:	Provision and sales of 3D-VR camera and image scanning service
Capital:	5,000,000 yen
Parent company:	3DNest (Zhongqu (Beijing) Technology Co., Ltd.(China)
Address:	HQ:104,Tensyo-yoyogi ANNEX,1-30-14,Yoyogi,Shibuyaku,Tokyo Sales&R&D:2-6-18,Tenkubo,Tsukuba,Ibaraki, 305-0005
URL:	http://3dnest.co.jp/

Support from JETRO

- Temporary office (IBSC)
- Referrals to local service providers (certified legal specialists for visa application, tax accountants, banks and real estate agencies)
- Consultation on visa and labor matters