

26 October 2015

KKE and NavVis to Form a Partnership for Indoor Mapping and Digitalization Services in Japan

Kozo Keikaku Engineering Inc. (“KKE”- Head Office: Nakano-ku, Tokyo, President: Shota Hattori) announced today that it has signed a partnership agreement with NavVis GmbH (“NavVis”- Head Office: Munich, Germany, CEO: Felix Reinshagen) to sell and market NavVis’s products, services and value added services in Japan.

■ **Background and Objectives**

As mobile devices become more and more widely used, mapping and navigation services based on GPS and geographical information have become extremely popular in supporting our everyday lives. However, until now these services were only available outdoors and we have not had reasonable and practical mapping and navigation services for indoors, where more than 80% of economic activities take place. To solve this problem, NavVis created a better way of mapping, navigating, and interacting virtually in indoor spaces, using its computer vision-based technology, which is inspired by nature. Since its establishment in May 2013, NavVis has won various awards as well as many customer orders, proving the high value and significant benefits of its technology.

In Japan, similar demands are increasing. In many of KKE’s business, such as health monitoring, marketing services for retail industries, and structural engineering services, the demand for not only outdoor but also indoor mapping and digitalization is emerging. The partnership with NavVis gives KKE the ability to provide Japanese customers with an efficient indoor mapping platform that replaces GPS, and enables KKE to strive to further contribute to society.

Over the years, KKE has actively employed numerous useful software and other solutions from abroad and added value to successfully meet the demand of the unique Japanese market. Under the partnership with NavVis, KKE provides not only sales and support of NavVis products in Japanese, but it also provides a wide range of engineering services that meet clients’ requirements, from experimental projects to large-scale system developments. Having entered into this strong partnership with NavVis, KKE is now ready to provide mapping services using its resources (personnel and equipment), application proposals, as well as customization services throughout Japan.

■ **Product Overview**

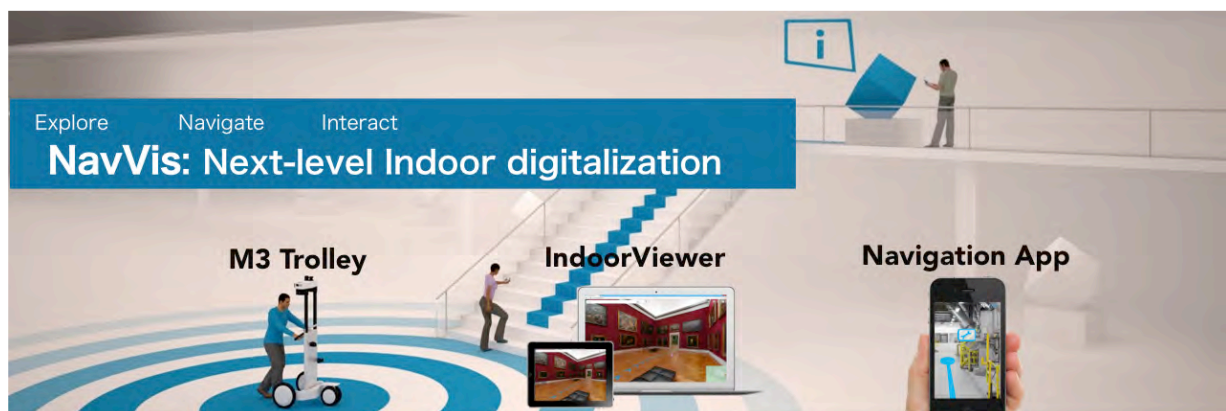


Fig. 1 Next-level Indoor Digitalization Platform: NavVis

- **M3 Trolley:** A 3D indoor mapping system that captures and digitalizes all details of a building with high-resolution images (16mil pixels) and 3D point clouds. Applicable to any type of building or underground mall, Indoor Digitalization processes the captured data automatically and a 3D map can be opened in any web browser using IndoorViewer.
- **IndoorViewer:** A browser-based software that comes free with the purchase of the M3 Trolley. Once mapping has been completed, IndoorViewer allows you to “walk” through the captured spaces and view the high-resolution panoramic images. Various options and tools allow for a deep dive into every single detail of the recorded data. Create individualized maps, perform spatial analyses (measuring distances, volumes, angles), segment objects and perform many more tasks using your favorite software (ESRI, Autodesk, PCL, Meshlab, etc.) by exporting the data in industry standard formats such as PLY or PCD.
- **Navigation App:** Hold up a smartphone for a second and NavVis’s patented computer vision algorithms immediately recognize your environment to determine orientation and location accurate to the meter. NavVis intuitively leads the way with virtual reality turn-by-turn navigation.

■ Examples of Actual Use



[Facility Management] Even a gigantic, complex building or a building without blueprints can be digitalized in one day using NavVis. A maze-like floor can be navigated perfectly. Easily connect facility information to location data, quickly locate maintenance sites and perform online planning and task preparation.

[Retail] Expand real-world retail space affordably and easily using a virtual shopping universe. Increase sales by providing your customers with an innovative virtual shopping environments that present your products vividly.



[Construction Management] Quickly and easily capture holistic and complete data on construction sites with NavVis. Track the progress of your site at different stages, and make it available online for full traceability. By sharing your building status online, you can discuss, collaborate, and create transparency.

■ Showcasing Events

NavVis products and services will be showcased at the following KKE events:

[KKE Vision 2015] (<http://kkevision.kke.co.jp/kv2015/>)

- Tokyo
 - DATE: 10:00 a.m. ~ 5:30 p.m. Oct. 29, 2015 (Thursday)
 - VENUE: Hilton Tokyo

- Osaka
 - DATE: 1:00 p.m. ~ 6:00 p.m. Nov. 20, 2015 (Friday)
 - VENUE: Knowledge Capital Congrès Convention Center, Grand Front Osaka, North

■ About KKE (<http://www.kke.co.jp/en/>)

KOZO KEIKAKU ENGINEERING Inc.'s motto is "Innovating for a Wise Future," an expression that illustrates our attitude toward society. As a professional design and engineering firm, KKE strives to solve the various issues and challenges that society faces, utilizing its engineering expertise acquired through knowledge exchanges in diverse fields. KKE will thus contribute to creating a better society and systems for the next generation.

■ About NavVis GmbH (<http://www.navvis.com>)

Founded in May 2013, NavVis GmbH is a fast growing globally oriented high-tech company based in Munich, Germany. Leveraging its computer-based technology, NavVis creates a better way of mapping, navigating, and interacting virtually in indoor spaces. NavVis has received numerous awards.

■ For More Information

i-marketing@kke.co.jp

Overseas Marketing Dept.

Kozo Keikaku Engineering Inc.

+81-(0)3-5318-3091

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