

# Activities to Foster Medium- to Long-Term Growth

As current megatrends revolve around macrodynamic changes such as the rapid advancement of digital technology, the heightened momentum of environmental conservation, and the labor shortages and increased lifespans occurring in developed countries, the keywords to address these changes are 5G, AI, the IoT, CASE, Industry 4.0, automation, and labor and energy savings. These keywords drive demand for the various solutions THK offers. The Company is promoting various initiatives in both its industrial machinery and automotive and transportation businesses to realize this growth potential.

## Industrial Machinery Business

### Orders Officially Open for OMNIedge, an IoT Service for Manufacturing

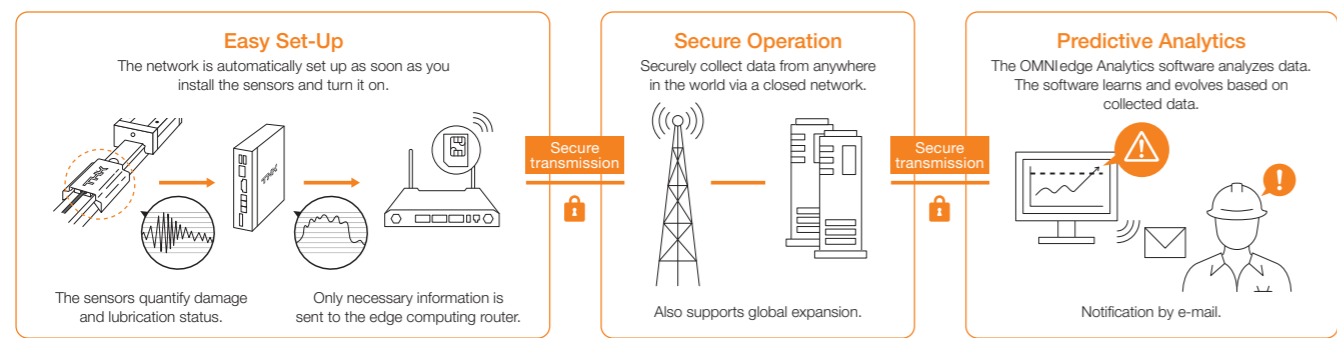
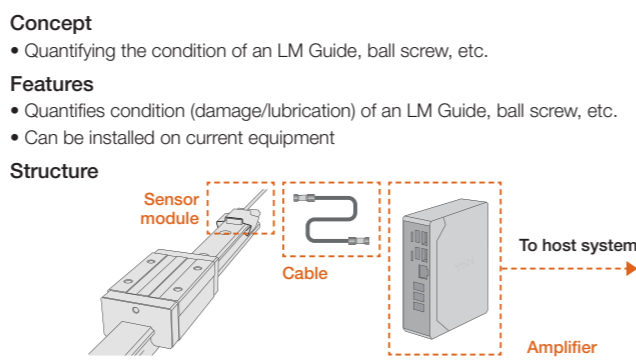
THK began accepting orders for LM Guide applications of OMNIedge on December 18, 2019. At the same time, the Company also began recruiting 50 participants for a free trial of ball screw applications. When recruiting for the free OMNIedge trial beginning October 2018, THK received applications from over 100 companies. Fifty-one were selected from various industries to participate in the trial, during which the Company collected and analyzed data about actual equipment environments. Many companies praised OMNIedge as a result of the trial, which led to the commercialization of the service.



### What is OMNIedge?

OMNIedge is a system that uses the data-collecting THK SENSING SYSTEM, a Cisco edge computing router, and an NTT DOCOMO network to predict failures before they happen by quantifying and analyzing the status of machine components. Through the visualization of a component's status, OMNIedge supports effortless production planning by making maintenance more efficient, reducing inventory management costs, and improving machine operating rates. In addition to adopting a subscription model that limits initial investment costs, THK offers a package that is easy to install and includes everything from the sensor to the network, providing a simple and secure system with zero initial costs.

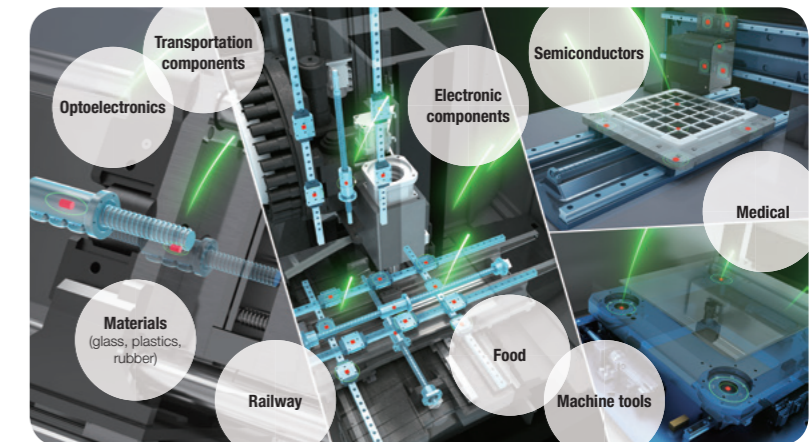
### THK SENSING SYSTEM



Global internet providers can be selected based on customer location.

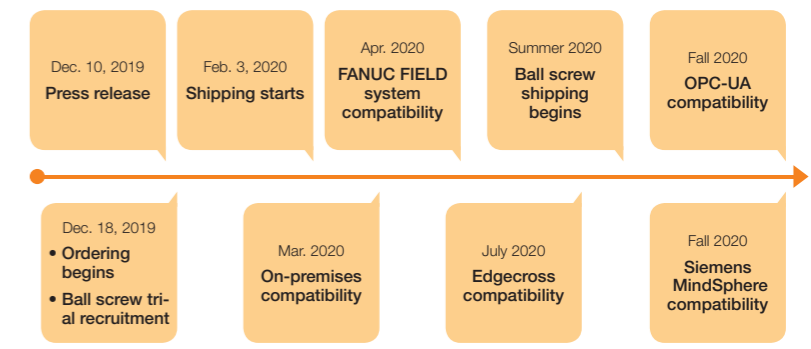
### Industries Involved in the LM Guide Trial

Rather than being restricted to a particular industry, OMNIedge can be used on a wide variety of devices with an LM Guide. The trial that THK conducted involved everything from specialized machinery such as machine tools to general transfer and assembly mechanisms used in many industries.



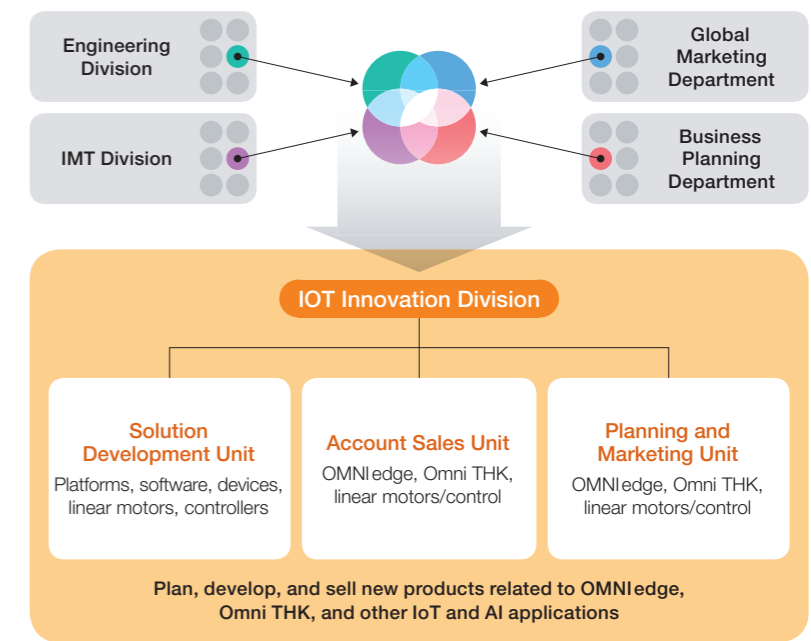
### Future Developments for OMNIedge

In addition to expanding the service to ball screws and other machine components besides the LM Guide, THK will make the service even easier to use by providing connectivity with external manufacturing IoT infrastructures.



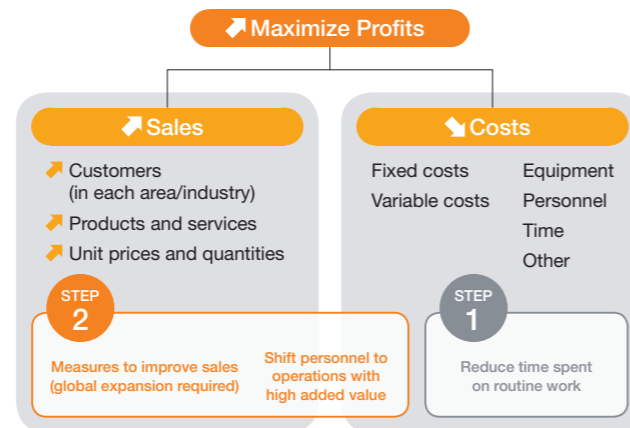
### Establishing the IOT Innovation Division

In January 2020, THK established a new IOT Innovation Division to deliver innovative services to its customers and society through digital technology revolving around the IoT and AI, including OMNIedge and Omni THK. The Company will accelerate its efforts to achieve this objective.



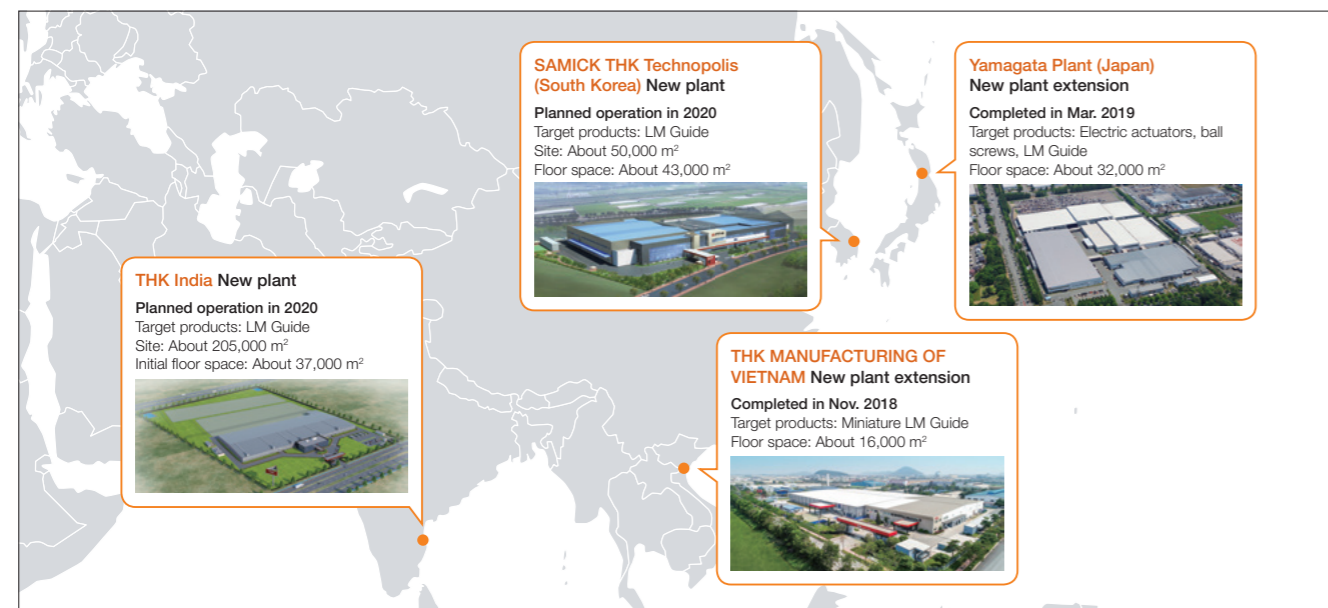
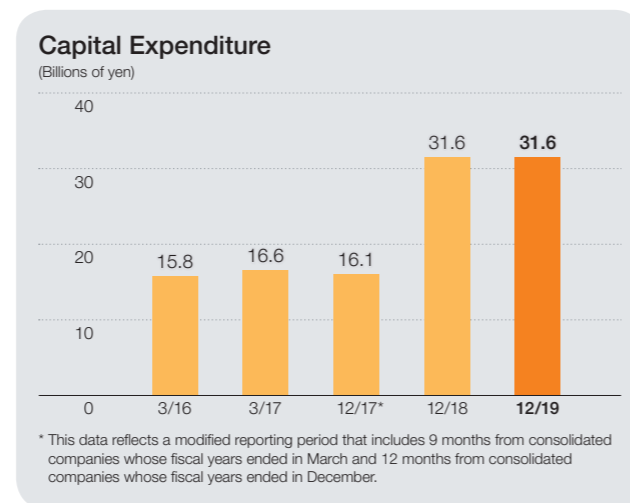
### Initiating Step 2 of the THK DX (Digital Transformation) Project

As digital technology advances around the world, every industry is rapidly advancing efforts to generate new value for existing business. Under these circumstances, the THK Group is promoting the THK DX Project in order to comprehensively organize the IT efforts of each department and branch, thereby enhancing customer satisfaction in a manner fitting with the times. During Step 1 in the 2019 fiscal year, THK worked to reduce the time it takes to perform routine tasks in every department. For Step 2, the Company will shift the employees that were freed up during Step 1 toward work with higher added value and develop measures to expand sales.



### Expanding THK's Global Production Structure

In an effort to support medium- to long-term top-line expansion, THK is strengthening the global production structure for its industrial machinery business. Besides the expansions of the THK Yamagata plant (Japan) and THK MANUFACTURING OF VIETNAM (Vietnam) that are now in operation, the Group is scheduled to finish construction and begin production at its new facilities for THK India (India) and SAMICK THK (a South Korean affiliate) in 2020. THK will continue to strengthen its production structure in order to steadily capture the anticipated medium- to long-term growth of demand spurred by the aforementioned keywords that accompany evolving trends.



### Automotive and Transportation Business



### Expanding the L&S Business and New Automotive Products

The automotive industry is said to be undergoing a once-in-a-century revolution, and "CASE" is the keyword that exemplifies this new era. CASE is an acronym combining the words "Connected," "Autonomous," "Shared/Service," and "Electric." Together, these elements have given birth to revolutionary technologies and services and are creating ripples of change that intersect with other industries.

Under these circumstances, while the L&S (Linkage and Suspension) business, centered around THK RHYTHM and TRA, is actively promoting sales activities to gain new business, it is also investing in equipment in every region around the world to increase production for that new business. In terms of new automotive products, the THK Group has been developing and mass-producing linear motion products for self-driving cars and working to expand the use of such products in various automotive mechanisms. As demand for linear motion products is expected to rise from the momentum provided by CASE trends, the THK Group will further accelerate its development

and sales activities in anticipation of the expansion of linear motion product use.

### Toward Profitability in 2021

The automotive and transportation business experienced an operating loss of ¥4.1 billion during the 2019 fiscal year, and a loss is also forecast for the 2020 fiscal year. This loss is the result of shipments for a large line of business being postponed, due to a schedule change from the automotive manufacturer, and investments made in advance, such as those for expanding its facilities, overtaking its profit. However, the THK Group anticipates that these high-volume products will begin shipping toward the end of 2020, and it will continue to bolster its productivity and process improvements in addition to revamping its global products and manufacturing lines, restructuring its employees and organization, and outsourcing. As a result, THK will reduce its costs by around ¥2 billion, and it estimates turning a profit of ¥1.5 billion in the 2021 fiscal year.

