

**B-EN-G's mcframe adopted as IoT technology for strengthening competitiveness in medium-sized Thai manufacturing businesses.
 MOU signed with Thailand's Ministry of Industry.**

As part of the *Connected Industries* initiative promoted by the Japanese government, Toyo Business Engineering Corporation (B-EN-G, headquartered in Chiyoda-ku, Tokyo, President and CEO Masanori Osawa) is pleased to announce that a memorandum of understanding (MOU) with Thailand's Ministry of Industry (MOI) was signed on May 11, 2018. The MOU calls for collaboration in the activities being promoted by the Thai Department of Industrial Promotion (DIP) (in relation to Thailand's version of IoT 4.0) aimed at revitalizing small and medium-sized industries in Thailand. This agreement is based on the memorandum of intent for cooperation on upgrading the industrial structure entered into by the Japanese Ministry of Economy, Trade and Industry, and Thailand's Ministry of Industry.

Activities in Thailand will be conducted by DIP and B-EN-G's Thai branch: Toyo Business Engineering (Thailand) Co., Ltd. (Managing Director: Ken Kitai).



Picture 1: Ceremony celebrating the signing of the MOU. From left, Mr. Uttama, Minister of MOI, Thailand; Mr. Kimura, President, Asahi Tekko; Mr. Kobchai, DIP, MOI, Thailand; Mr. Osawa, President, B-EN-G; Mr. Sadoshima, Ambassador to Thailand.



Picture 2: Mr. Osawa (left) is explaining the IoT products for Mr. Uttama (right), the Minister of MOI, and for Mr. Sadoshima (center right), the Ambassador to Thailand, at B-EN-G's exhibition booth.

The aims of this MOU

For many years, Thailand's manufacturing industry has been driven by the growth of its automotive sector, and has made great progress. The country's manufacturing industry is now looking toward its next stage, aiming to improve and upgrade its local productivity. In order to achieve this goal, the Ministry of Industry of Thailand has put forth its IoT promotional project, aimed at small and medium-sized businesses. As part of this project, B-EN-G, with its 17 years of

results supporting Thailand's manufacturing industries, will help Thailand's small and medium-sized businesses become more competitive by providing technology to digitize the movements of workers at manufacturing site and utilized the data.

DIP focused on B-EN-G technology & mcframe MOTION

This system uses motion sensors installed on site to record the movements and posture of workers in 3D, and performs analyses that lead to improved efficiency and business practices. It provides real-time observation of movement and posture without the need for large-scale equipment, allowing for both quantitative analysis and objective evaluation. The system can be leveraged to improve worker training, discover abnormal operations, investigate more productive equipment layouts, and so on.

Furthermore, by using the 3D movement data in mock environments, it can be fitted together with 3D object data created with CAD to generate movement simulations, or 360-degree camera angles illustrating operational or inspection procedures for training purposes. These types of applications expand the breadth and depth of what is possible with visual data.

B-EN-G provides services and a group of products aimed at the “digitalization of manufacturing” for customers. We work toward sophistication and digitalization for our customers, in Thailand and everywhere else.

■Toyo Business Engineering Corporation

Toyo Business Engineering Corporation (B-EN-G, Code 4828 on the Tokyo Stock Exchange) is a business engineering firm with a prolific record centered on Enterprise Resource Planning (ERP), from IT planning, BPR implementation consulting, and IT installation consulting to system construction services and operational services. It has also built up a track record in Supply-Chain Management (SCM), Manufacturing Execution System (MES), Master Data Management (MDM) , and Internet of Things (IoT) systems implementation as an enterprise IT infrastructure, as well as in global IT services to help our customers expand their businesses overseas such as China and other Asian countries. The mcframe product group includes a productivity and cost management package, as well as IoT products.

Toyo Business Engineering Corporation has overseas subsidiaries in five locations: Bangkok, Thailand; Singapore; Jakarta, Indonesia; Shanghai, China; and Chicago, USA.

For more details about Toyo Business Engineering, go to www.to-be.co.jp.

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