News Release

TOPPAN

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Toppan Printing Co., Ltd.
FPT Corporation

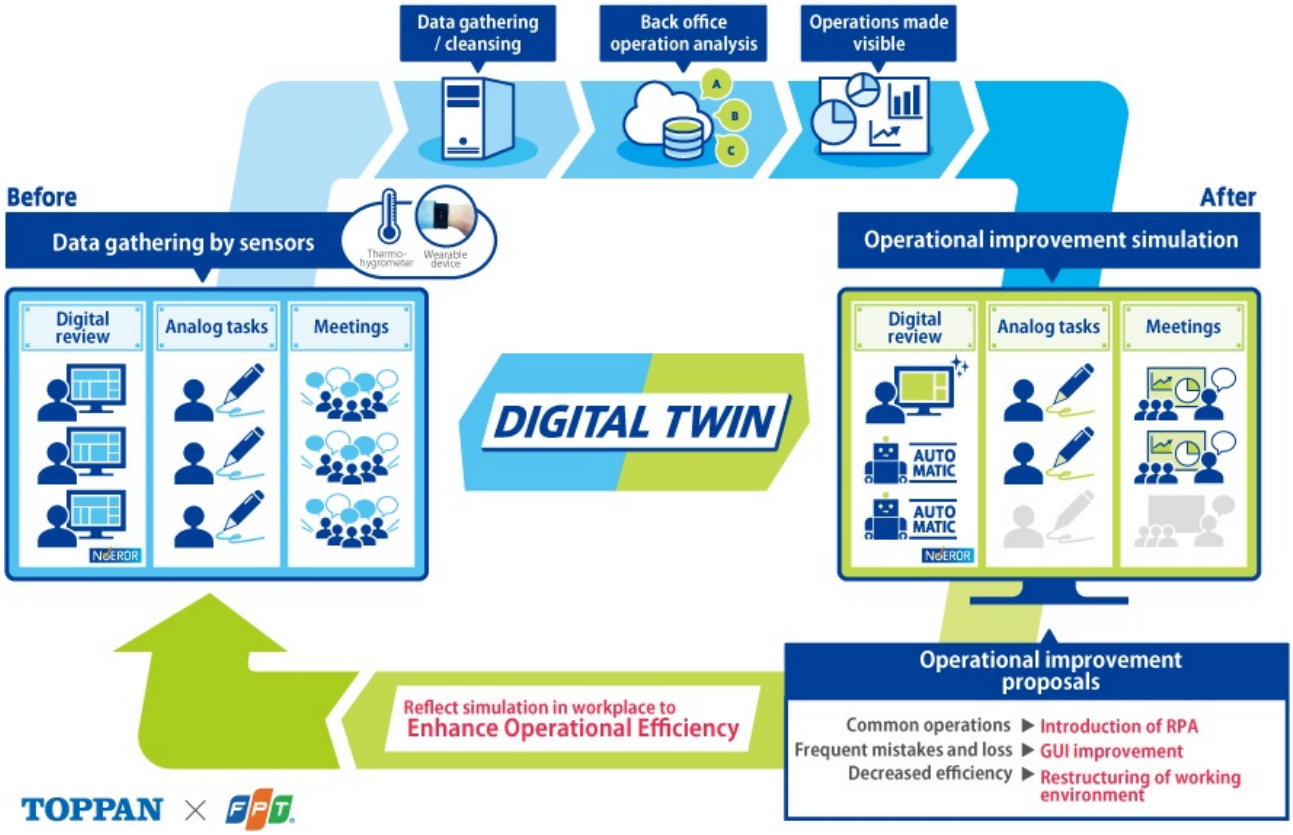
Toppan Printing Uses the IoT to Optimize Administrative Operations

Sensors and other industrial IoT devices used to make BPO and other administrative operations visible and create data-based digital simulations of workflow to enhance efficiency and quality.

In collaboration with Vietnam's leading IT company, FPT Corporation (hereafter FPT; head office Hanoi, Vietnam; Chairman: Truong Gia Binh), Toppan Printing Co., Ltd. (hereafter Toppan Printing; head office: Chiyoda Ward, Tokyo; President & Representative Director: Shingo Kaneko) has developed a simulation service to enhance the efficiency of administrative operations. The service uses sensors and other IoT devices for industry to make BPO and other administrative services visible and enable higher efficiency and quality. BPO solutions making use of the service will be launched in September 2018.

Prior to the launch of the service, its effectiveness will be verified through practical testing starting in May 2018 at BPO Square Asaka (Niiza, Saitama Prefecture), Toppan Printing's integrated base for BPO operations.

This new service will be part of the collaboration between Toppan Printing and FPT based on a memorandum of understanding for overseas BPO business signed in May 2016.



With this service, a scheme based on IoT platforms for industrial devices has been developed to enable Digital Twin, which has conventionally been employed predominantly in plants, to be used for administrative operations. Digital Twin is a technology for making use of huge amounts of data to create computer-based reconstructions of manufacturing locations as they were in the past and run simulations. The operation system, developed in collaboration with FPT, collects information on people, things, and equipment via sensors and other devices and registers and analyzes that information on cloud-based databases to enhance the efficiency of administrative operations.

Specifically, in addition to data on work done and quality, it enables biometric information on operators and data about conditions in the room to be recorded, analyzed, and made visible. This detailed analysis of operations makes it possible to propose improvements that enhance efficiency, such as introducing robotic process automation (RPA) to common parts of operations, improving the graphical user interface (GUI) for operations in which a high level of loss occurs, and restructuring the working environment.

■ Background to development

With the aim of enhancing operational efficiency, in recent years there has been increased demand from customers wanting to outsource business operations, application processing, response to inquiries, and other administrative tasks. In particular, changes to legislation and systems mean that in catering to such fields as finance, medical and health care, environmental energy, the public sector, and local governments, the type and scope of services are becoming more complex and large scale, and the level of quality required is increasing rapidly. Attention is also focused on digital transformation that brings together huge quantities of data amassed by companies to uncover new value.

Toppan Printing is an integrated printing company founded in 1900. BPO operations, in which it handles administration, dispatch, contact centers, and a wide range of other services on behalf of companies and local governments, are positioned as one of Toppan's priority businesses. The company has an extensive track record in Japan of exploiting its expertise in large-scale projects involving vast amounts of data and high levels of security for such tasks as the handling of personal information. It has 11 locations for BPO business in Japan, including BPO Square Asaka, a core site opened in 2016, and the scope of operations continues to diversify.

FPT was founded in Vietnam in 1988. It is a leading IT outsourcing company in Southeast Asia with core businesses in software development, system integration, telecommunications, ICT product distribution and retail, and education. In its system integration business using sensors and other IoT devices for industrial use, FPT has exploited its strengths in connectivity clouds, data analysis, and system coordination to build up a strong track record, which includes IoT solutions for elevators, predictive maintenance of robotic arms, and SmartMeasure™, an IoT solution for measurement devices showcased at an event held in Japan in 2016.

The new service to enhance the efficiency of companies' operations has been developed by fusing the BPO expertise accumulated by Toppan Printing with FPT's know-how on the use of IoT data.

■ Benefits of adopting the new service

・Improving efficiency by making things visible

The system can help improve workplace environments and operational efficiency through integrated analysis of multiple forms of information related to records of work done, quality, biometric data, working conditions, and more.

・Stabilizing operational quality at a high level

Making it possible to identify operations performed by people that are often dependent on individual skills enables the introduction of RPA and other solutions to facilitate stable quality that does not rely on people's levels of experience.

・Facilitating telecommuting

With increased telecommuting, including the expansion of crowdsourcing, this service makes job matching and high-efficiency, high-quality operation possible by evaluating what is done and identifying issues that need to be addressed.

■ Future targets

Toppan Printing will continue to promote this service and other activities aimed at using digital technologies to reduce workloads. The company is targeting sales of approximately ¥120 billion in 2020 for its BPO business as a whole.

In the future Toppan Printing will also aim to add AI-based automated decision-making to the service and develop new functions making use of its information processing know-how. Learning data will be used to contribute to further enhancements in operational efficiency.

■ Practical testing at BPO Square Asaka

Schedule	May to September 2018 (5 months)
Location	BPO Square Asaka
Purpose	Making the status of BPO operations visible and enhancing efficiency based on the results
Details	Implement a PDCA cycle of displaying biometric information provided by wearable sensors on BPO operators, records of tasks performed on PCs, and information on conditions in the workspace on a dashboard and identifying areas for improvement by analyzing the information.