NEWS RELEASE

Full-Fledged Deployment of "Trifacta Wrangler Enterprise" to Establish Environment for Utilization of Big Data

Sumitomo Mitsui Banking Corporation (President: Makoto Takashima; below, "SMBC") and The Japan Research Institute, Limited (Representative Director, President, and CEO: Masahiro Fuchizaki; below, "JRI") will fully deploy, and commence use of in March 2019, Trifacta Wrangler Enterprise (below, "Trifacta;" see Note 1), software that greatly enhances the efficiency of data preparation. This move, which will be undertaken with assistance from NEC Corporation (Representative Director, President, and CEO: Takashi Niino; below "NEC"), is aimed at raising the speed and sophistication of data analysis by SMBC. The Trifacta software was developed by a startup based in San Francisco in the U.S., and this will be the first time that it has been deployed in Japan.

In recent years, the lifestyles of customers have been diversifying, and the quantity of data has been rapidly increasing, as a result of multifunction devices such as smartphones and the proliferation of social networking services. So with such goals as providing services that meet the diversifying needs of each customer, the use of data is expanding in various sectors, and the importance of the analysis/utilization of data is expected to continue to increase at an accelerating rate in the future. At SMBC, we have been working to enhance the sophistication of big-data analysis through the introduction of advanced technology for some time. For example, we have already adopted an AI-technology-driven process for data analysis (see Note 2).

The analysis of data requires that vast volumes of myriad and diverse data, which can run from several thousand to several hundred million lines, first be converted into a format that can be analyzed, a procedure that is referred to as "data preparation." This procedure accounts for 30 percent of the workload for the entire data-analysis operation. At SMBC, we have been employing AI to raise the efficiency and sophistication of data analysis/processing, but this procedure is being performed manually and involves trial and error. It takes time, so we have been relying on the knowledge and experience of experts to complete it.
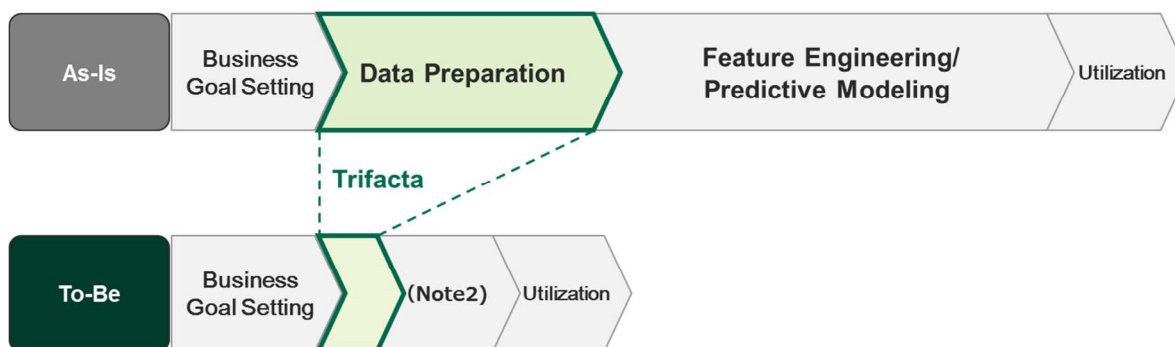
So with an eye to fundamentally enhancing the efficiency/sophistication of data preparation, SMBC and JRI had the SMFG Silicon Valley Digital Innovation Lab conduct a technical survey of local startups, and our attention was drawn to Trifacta, which enables the format of myriad and diverse forms of data stored in multiple databases to be instantly identified and swiftly and easily extracted and processed without the need for high-level specialist skills. So working with NEC, which possesses a strong track record and knowhow in

the deployment of advanced AI technologies, in September and October we field-tested the software in the processing/aggregation of large quantities of data. This testing confirmed that it would be possible to cut the work time for data preparation by around 80% compared with before.

In response to these findings, SMBC determined that its data analysis operations would become substantially more efficient, and that it would be possible to more rapidly complete the cycle of formulating assumptions about customer needs and then verifying those assumptions. We therefore decided to deploy Trifacta as a data preparation tool for the entire SMBC Group.

SMBC and JRI will be working with NEC, leveraging the achievements and knowhow gained from this initiative to roll out the tool throughout the SMBC Group, and will continue to endeavor to get the SMBC Group working together to adapt to changing times and enhance the sophistication of the combination of "finance and big data," and thereby further improve customer service, through the proactive utilization of new digital technologies.

[Overview of the data-analysis process]

Note 1: Data preparation software supplied by Trifacta Inc. (head office: San Francisco, California, U.S.A.). https://www.trifacta.com/

Note 2: Enhanced the sophistication and efficiency of data analysis within the SMBC Group through the utilization of AI-driven data-analysis technology supplied by NEC and dotData. https://jpn.nec.com/press/201807/20180713_02.html

Also currently investigating the application of advanced data-analysis technologies.