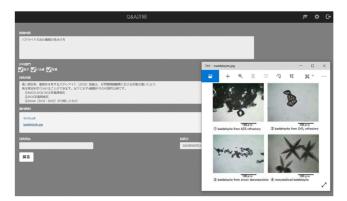


AGC and FRONTEO Co-develop "Takumi KIBIT," an AI-driven Q&A System - Using Computers to Help Realize Glass Manufacturing Craftsmanship -

Tokyo, July 2, 2020 - AGC (headquartered in Tokyo; President: Takuya Shimamura) and FRONTEO, Inc. ("FRONTEO"; headquartered in: Tokyo; President: Masahiro Morimoto) have co-developed "Takumi KIBIT," an AI-driven Q&A system, which integrates existing glass manufacturing-related knowledge onto computer system, and provides production staff with easy access to the knowledge by using AI. The system has already been in operation at several AGC factories in Japan, and its global deployment, including Europe, is now under consideration.





Al-driven Q&A System "Takumi KIBIT"

Takumi KIBIT in use

Glass manufacturing is a very complexed process. It is composed of multiple technical aspects such as melting, drawing, fabricating, and so on, and requires high level of technical capabilities to properly operate. While those proprietary technical assets have been much helping maintain AGC's differentiative positioning, they have also adversely posed major challenges in plant-to-plant know-how sharing, or the skilled-to-the unskilled technical transfer.

In 2017, AGC launched the Takumi Project, aiming at solving these issues by AI and IT. As part of this project, AGC has newly developed "Takumi KIBIT," an AI-driven Q&A system for glass manufacturing, by using FRONTEO's natural language processing AI engine, KIBIT. This system allows production staff to easily access the skilled engineers' glass manufacturing knowledge accumulated over many years.

The main process of Takumi KIBIT is as follows:

- 1. Question: Users enter question they want to ask
- 2. Learn: KIBIT learns characteristics of the questions
- 3. Evaluate: KIBIT picks up target "questions" according to the relevance to the question asked in 1.
- 4. Reply: KIBIT presents "answers" tagged with the target "questions" of 3.to users.

Kazumi Tamaki, General Manager, Corporate Communications & Investor Relations Division AGC Inc.

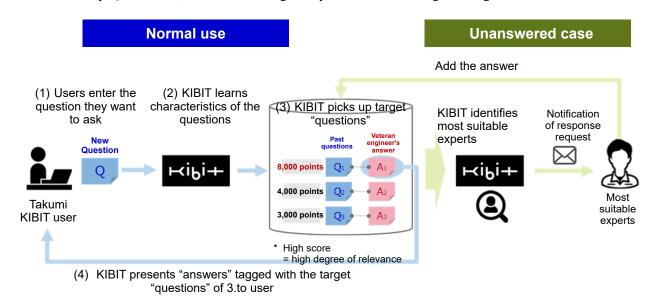
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News Release

For unanswered questions, KIBIT identifies most suitable experts, sends inquiry to them, and collect answers from them. This whole process, entirely operated automatically, has enabled the system to enrich the database autonomously. Since 2017, AGC has continued the trial at glass manufacturing factories in Japan, achieved over 300 times of monthly Q&A access, and been showing steady results in knowledge sharing and technical transfer.



Takumi KIBIT process

Under its **AGC plus** management policy, the AGC Group is committed to promoting Smart AGC, which aims to reform business processes through digital technology. By utilizing big data from every aspect of operations including manufacturing, R&D, and sales, AGC continues to pursue the goals of achieving even more efficient operations and delivering new added value to its customers.

REFERENCE

■ About FRONTEO

FRONTEO is a company that supports information analysis through technologies such as its proprietary natural language processing AI (artificial intelligence) engine KIBIT. FRONTEO was established in August 2003 as a company that supports digital forensic investigations and e-discovery (electronic discovery of evidence), which preserves, investigates and analyzes electronic data evidence necessary for international litigation, etc. To date, the company has supported some 10,000 international litigation activities by leveraging technologies developed by the company, such as its proprietary data analysis platform. The company has also deployed its proprietary AI-related technologies, originally developed in its legal business, to other areas such as life science and business intelligence, and has been building up a solid track record in supporting drug discovery research and diagnostics, and reforming the way people work.

URL: https://www.fronteo.com/en/

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