May 19, 2025

Press Release

Keio University

## Keio University Collaborates with KTIP to Develop an Auction System for Aged Sake Using NFTs: Creating New Value for Sake through the Fusion of Market Design and Fintech

Keio University (Address: Minato City, Tokyo; President: Kohei Itoh), in collaboration with Kokushu Tech Innovation Promotion Organization (hereafter "KTIP"; Address: Chuo City, Tokyo; President: Nobuyuki Sato), has developed an auction system for aged *sake* that utilizes NFTs. This project is a continuation of the verification study on food chains which was announced in a press release last year (<a href="https://www.keio.ac.jp/en/press-releases/2024/May/30/49-159272/">https://www.keio.ac.jp/en/press-releases/2024/May/30/49-159272/</a>) and is aimed at creating new value for *sake* and promoting Japanese *sake* culture in novel ways.

## 1. Main Points of Research

- Adopted a uniform price auction system and designed a mechanism for price-setting in the aged sake market
- Developed NFT (Non-Fungible Token) technology to manage aged *sake* as a safe digital asset while ensuring reliability and traceability

## 2. Background of Research

When a *sake* brewery is damaged by a large-scale disaster and has to be relocated, the challenge is how to pass on the history and spirit of the old brewery to the new one.

In 2024, the FinTEK Centre (Director: Teruo Nakatsuma) and the Market Design Research Center (Director: Morimitsu Kurino), both affiliated with the Institute for Economic Studies, the Faculty of Economics, Keio University, together with the Institute of Brewing and Fermentation (Director: Tsukasa Matsuda) at Fukushima University, collaborated with Kinsuisho Sake Brewery Co. Ltd. on a food chain verification study that covers brewing to sales. In this study, *sake* from a brewery damaged in a 2022 earthquake will be used to brew aged *sake* at the new brewery. This will allow the new brewery to inherit the history and spirit of the old one and promote sales by adding one-of-a-kind value to the *sake*.

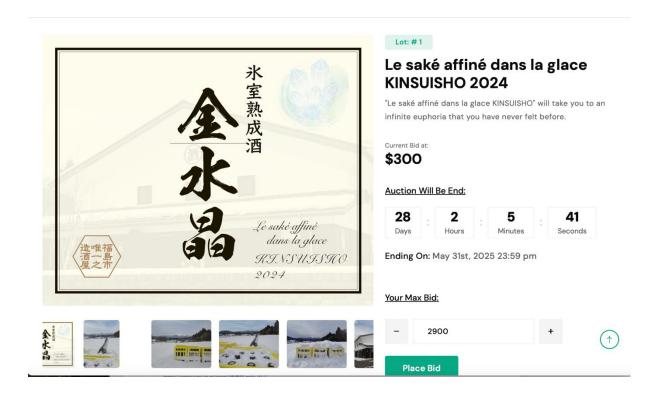
The current research project is a continuation of the abovementioned food chain verification study and was motivated by the desire to create new value for *sake* and promote Japanese *sake* culture in novel ways.

3. Research Design and Findings

Joint research on the optimal auction method for aged *sake* was conducted with the Market Design Research Center under the Institute for Economic Studies at the Faculty of Economics, Keio University. The conclusion reached was that a uniform price auction method would be the best approach. The NFT technology necessary to establish this system was developed through joint research with the FinTEK Centre under the Institute for Economic Studies at the Faculty of Economics, Keio University. A patent application has already been filed for the NFT auction mechanism which will be protected as intellectual property.

## 4. Future Developments

KTIP will operate the auction site (traditionjpn.com) which utilizes this system. The site is scheduled to officially begin service on May 18, 2025.



- \*Please direct any requests or inquiries to the contacts listed below in advance of any press coverage.
- \*We have sent this news release to the MEXT Press Club, Science Press Club, and the science departments of other media outlets.
- · Inquiries about research

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· Source of this release

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