Keio University
ITOCHU Techno Solutions Corporation
Japan Digital Design, Inc.

JCB Co., Ltd.
Nippon Telegraph and Telephone West Corporation
BlockBase, Inc.

# Keio University Commences Demonstration Experiment of Next-Generation Digital Identity Platform

To issue certificates of enrollment and certificates of expected graduation to smartphone applications

Keio University Information Technology Center (Osamu Nakamura, Director) and the Blockchain Laboratory of the Keio Research Institute at SFC (Jun Murai, Director and Shigeya Suzuki, Associate Director & Technology Officer) commenced a demonstration experiment for a next-generation digital identity platform issuing certificates, such as enrollment certificates and certificates of expected graduation to Keio University students via smartphone applications in October 2020. The experiment is being conducted jointly with five companies; ITOCHU Techno-Solutions Corporation (Ichiro Tsuge, President & CEO), Japan Digital Design, Inc. (Takashi Uehara, CEO), JCB Co., Ltd. (Ichiro Hamakawa, President & CEO), Nippon Telegraph and Telephone West Corporation (Mitsuyoshi Kobayashi, President), and BlockBase, Inc. (Taiju Sanagi, CEO) and also in collaboration with Microsoft Corporation.

The COVID-19 pandemic has caused many universities to move more and more of their classes and administrative procedures that had traditionally been conducted in-person online. Following this trend, there is a need to create a system enabling current students and graduates to request various certificates online.

#### ■About this demonstration experiment

The purpose of this demonstration experiment is to verify the functionality and standardization of the digital identity platform, which will enable students to obtain various certificates online without having to present their IDs or complete written procedures at the university's academic affairs office. This next-generation digital identity platform utilizes Verifiable Credentials (VC), a generalized digital certificate technology currently being standardized, and Decentralized Identifiers (DIDs), a persistent decentralized identifier model independent of any particular company or organization. By utilizing these technologies, this platform will be able to verify graduation certificates, training

completion certificates, and other types of certifying data online, in addition to other attributes, such as names, addresses, and ages.

The project also includes cooperation with the private sector in the demonstration experiment, with the certificates of expected graduation being issued to students who are looking for jobs using a smartphone application. The employers receive transcripts and certificates of expected graduation. Information sharing between universities in different regions and countries has also been considered for students moving or transferring to other schools. By conforming to international standards and achieving interoperability, the system will not only facilitate the identification of students in online classes but also reduce the amount of time and effort required to share information on the credits earned by students from different universities. One future goal of the system is to improve convenience for the students, e.g., to provide student discounts, by linking this system to commercial systems, such as payment systems and commuter pass systems.

It is also expected that the general verifiability of the persistent digital identities issued by the university will expand business in areas such as finance, healthcare, and government services, which require credit information and quick identification.

### Schedule for the demonstration experiment

September 2020 Trial operation of the experimental version of the ID

platform used in demonstration experiment

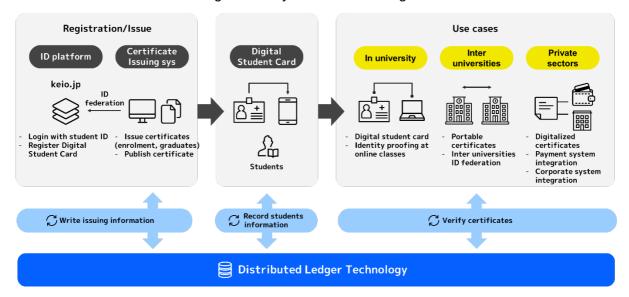
October 2020 to February 2021 Development of ID platform for the demonstration

experiment

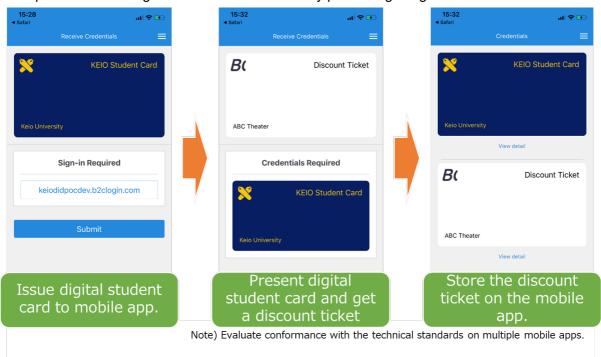
March 2021 Start of demonstration experiments in some

scenarios

## Digital Identity Platform Use Diagram



## Example of Use: Issuing a student discount ticket by presenting a digital student ID card



## **Contact Information**

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Note: Please check the phone number and make sure it is correct.