



Mizuho Bank, Ltd.

FIDO biometric authentication in banking application realizes twin benefits of higher security and better customer experience

Online services generally require a username and password for access. Recently, however, the leaking of passwords and the inconvenience of needing to remember multiple passwords have become issues. To resolve them, Mizuho Bank has introduced biometric authentication to its online banking offerings with the deployment of 'Finplex Online Authentication Service for FIDO', which is available via Fujitsu's MetaArc platform. Mizuho Bank also plans to roll out this offering to cover wide-ranging services beyond online banking.

Fujitsu has a proven track record in building banking systems, and we regard them as a highly reliable company. In the future, we plan to promote the use of biometric authentication in other areas, such as when transferring funds and also in our ATMs and internal systems. We are also considering its adoption as an authentication platform.

Taiji Sudou
Senior Manager,
IT & Systems Control Department No. 1,
Mizuho Bank, Ltd.

Adoption of FIDO as an authentication standard to replace passwords

Today most people prefer the convenience of online banking. According to Kazunori Suhara, Personal Marketing Department, Mizuho Bank, "The use of internet banking is increasing at Mizuho. Rather than visiting a branch, more and more customers are accessing banking services via digital channels."

Cybercrime, and especially preventing the impersonation of a user to gain access to their accounts has become a major challenge. Traditional online banking services require user names

and passwords for authentication. If a password becomes known to a third party, there is a significant risk that party will be able to access the customer's account.

To address this issue, Mizuho Bank, Ltd. (Mizuho Bank) has deployed the 'Finplex Online Authentication Service for FIDO', which is available via the FUJITSU Digital Business Platform MetaArc. Through this service, the Bank has been offering highly secure biometric authentication since October 2017. FIDO (Fast IDentity Online) is a new international standard for swift online authentication that replaces passwords. It is expected to become the de facto standard for online authentication.

Taiji Sudou, Senior Manager of IT & Systems Control Department No.1 at Mizuho Bank adds, "The greatest attraction of FIDO is that the Bank doesn't need to retain biometric data of its customers. This is because the customer sends only a digital signature to the server after completing authentication from his/ her smartphone. Since biometric data is not transmitted via the internet, the risk of leaks is low."

Rapid delivery of a platform to handle diverse biometric data
Attention to customer experience at the development phase

Mizuho Bank embarked on this project in December 2016. Prior to that, it had been investigating the potential of Fintech, Artificial

Intelligence (AI), and biometric authentication, and had made arrangements with several vendors. Fujitsu recommended FIDO, which Mizuho Bank decided to adopt in February 2017.

Kazunori Suhara explains the reason for implementing the FIDO standard from Fujitsu, "We chose it because it allows us to quickly address the full line up of biometric authentication protocols, including fingerprint, facial, and iris recognition."

Taiji Sudou adds, "Fujitsu has a proven track record in building banking systems, and we regard them as a highly reliable company. Also, Fujitsu is a founding member of the FIDO Alliance, and it has a business tie-up with Nok Nok Labs, a leader in FIDO standardization. Fujitsu's support of all of the standards specified by Nok Nok Labs was also an important factor. And Fujitsu has experience in smartphone development and so has superior technological capabilities to address the different characteristics of various smartphone devices."

With a view toward a future global rollout, Fujitsu organized a team to participate in the project, consisting of members from Japan and overseas. To maximize user convenience, Fujitsu decided to incorporate existing banking application rather than develop biometric authentication components apart from the application. The system development began in April 2017 and it was completed in just 6 months. The FIDO-based biometric authentication is now available via the 'Mizuho Direct App' login screen.

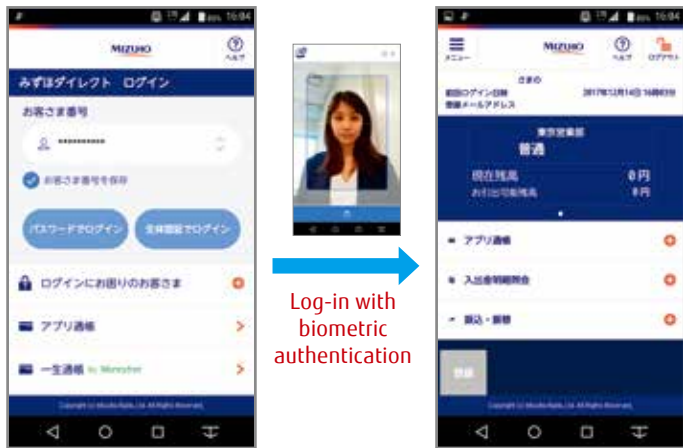
In addition to fingerprints and irises, the system supports facial recognition from smartphone cameras as biometric data for authentication, which means a wide range of camera-equipped smartphones can be used. Once registration is complete, the user only needs to select 'Log-in with biometric authentication' to permit the reading of his/her biometric data. It is a simpler and more secure authentication system that does not require a password.

Sharp increase in registered users thanks to positive social media feedback
Applications beyond online banking are on the horizon

The number of registered users has been rapidly increasing, even without any major advertising campaign. From the beginning, many users posted positive comments about the system's ease of use and convenience on social media platforms and so on. This is one of the reason which drove up the number of users in a short timeframe.

Kazunori Suhara continues, "We reached 60% of our target in the first month. We were also surprised ourselves that this new services succeeded in being widely used among many customers in such a short period."

Taiji Sudou adds, "In the future, we plan to promote the use of biometric authentication in other areas, such as when transferring funds and also in our ATMs and internal systems. We are also considering its adoption as a 'Mizuho' authentication platform." Mizuho can use FIDO to address their diverse needs because the



The device screen of logging-in with biometric authentication

FIDO standard can be adapted easily to new authentication methods. Another key reason for choosing FIDO is that Mizuho is willing to deploy it in other services that evolve from the latest authentication technologies.

Kazunori Suhara concludes, "Our ultimate aim is to remove the need for passwords. We wish to build such service together with Fujitsu."

Customer Profile

Name: Mizuho Bank, Ltd.

Address: Otemachi Tower, 1-5-5 Otemachi, Chiyoda-ku, Tokyo

Inauguration: July 2013

Employees: 29,848 (as of March 31, 2017)

Website: <https://www.mizuho-bank.com/index.html>