

Report on Pilot Test of DLT Information Sharing Platform  
in the Field of Securities Post-Trade (Project Name: B-POST)

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September, 2021

Japan Securities Depository Center, Inc.

# 1. Project Background, Objectives, and Implementation

# Project Background and Objectives

Processes in securities post-trade\*<sup>1</sup> are mostly conducted mutually. It has been pointed out that differences in understanding between counterparties about data and workflows can lead to inefficiency.

An information sharing platform that synchronizes data and workflows would enable companies to check the latest definitive status of a trade at any time, possibly solving various problems in the post-trade field that companies struggle to solve alone. For this pilot test, we discussed the inefficiencies in securities post-trade and visualized future vision, as well as build a information sharing platform using DLT\*<sup>2</sup>, and invite a wide range of industry participants, including securities companies, asset management companies, trust banks, and service providers to participate in using it. Through verification of the results of these use cases, as well as testing operation of the infrastructure, we considered the feasibility and usefulness of the DLT platform for operations.

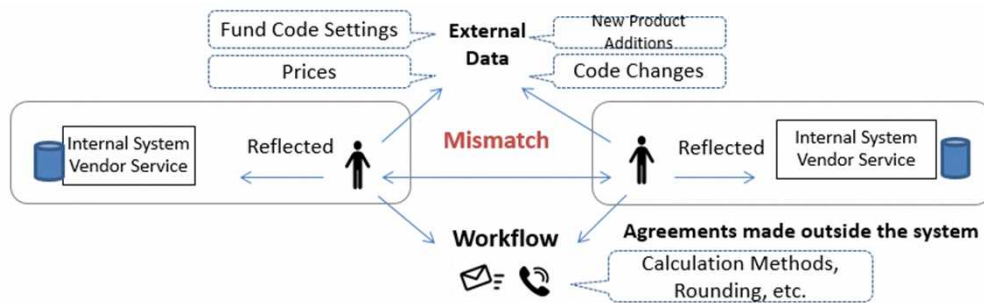
\*1: Securities post-trade refers to all processes that occur after a securities transaction is executed.

\*2: DLT: Distributed Ledger Technology

## <The Challenge and the Solution>

Modified from press release on project launch (Mar. 6, 2020)

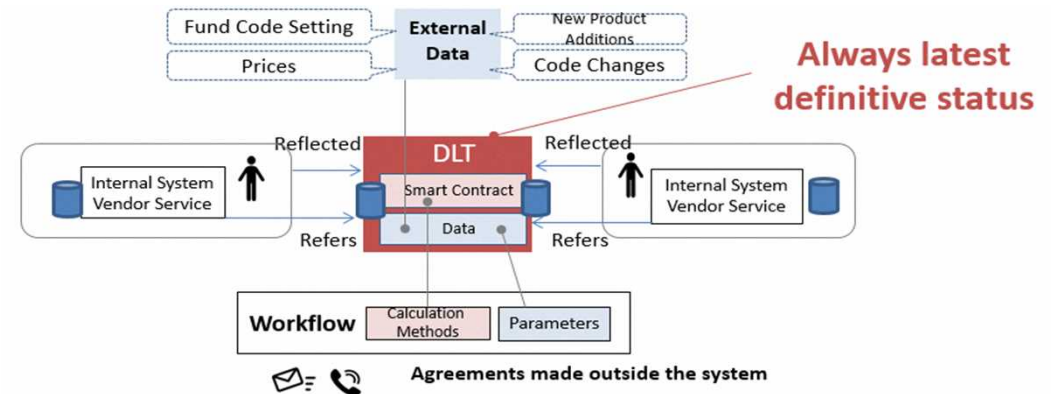
### The challenge



Probable fundamental issues in the field of post-trade

- (1) Information is dispersed
- (2) Mismatches due to different workflows
- (3) No industry standard nor shared infrastructure that shares and executes the above

### The solution



## Selected Use Cases

- Collected ideas from project participants about securities post-trade. Categorized the results into nine use cases.
- Narrow down the nine use cases to three use cases based on votes by project participants, looked into the issues, examined future visions, and verified the feasibility.

### <Use Cases Selected for Verification>

Use Case 1	Sharing fund/SSI/basic corporate information
<b>Use Case 2</b>	<b>Resolution of non-compatibility of fund distribution networks</b>
Use Case 3	Sharing information on borrowing/lending fee, collateral interest and dividend equivalent in stock borrowing and lending transactions

### <Other Use Cases Considered>

Use Case (a)	Sharing information on changes in collateral/margin for listed futures and options
Use Case (b)	Sharing information in trade reconciliation for foreign bonds
Use Case (c)	Centralized management of dividend information
Use Case (d)	Centralized management of market price data
Use Case (e)	Centralized management of business days of Asian markets
Use Case (f)	Sharing information on allocation/confirmation (Continue examination of issues from Ph2 DLT application to trade reconciliation) * Issues not related to DLT platform include consideration of unification of the Equity Confirmation format.

# Project Participants

- Project participants are following.

BofA Securities Japan Co., Ltd.

Broadbridge (Japan) Limited

Daiwa Asset Management Co. Ltd.

Daiwa Institute of Research Business Innovation Ltd.

DTCC Japan K.K.

HSBC Securities (Japan) Limited

Japan Securities Finance Co., Ltd.

Mizuho Securities Co., Ltd.

MUFG Bank, Ltd.

Nomura Asset Management Co., Ltd.

Nomura Research Institute, Ltd.

Nomura Securities Co., Ltd.

OGIS-RI Co., Ltd.

Rakuten Securities Inc.

SBI Holdings Inc.

SBI Securities Co., Ltd.

Simplex Inc.

SMBC Nikko Securities Inc.

Sumitomo Mitsui DS Asset Management Company, Limited

The Master Trust Bank of Japan, Ltd.

XNET Corporation

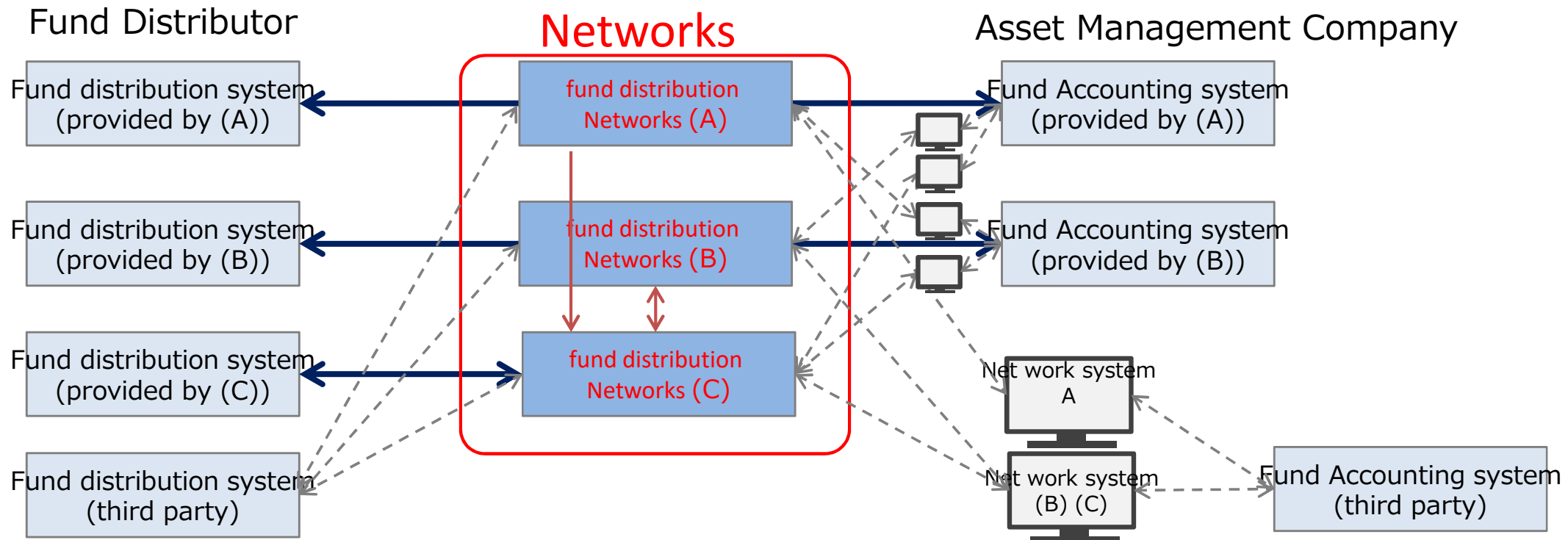
And others, 24 companies in total

## 2. Review of Use Cases

\_"Resolution of non-compatibility of fund distribution networks"

- The fund distribution networks are provided by three IT companies. In many cases, the fund distribution companies decide which network are they going to use and basically the asset management companies have to follow to their decision and connect through that designated network, which is inefficient in terms of business and cost.
- When there is an incompatibility in the fund distribution networks or in case one of them does not use the fund distribution network, data have to be transferred by fax or e-mail must be input manually into their system, which is inefficient and hinders remote work.

## Fund Distribution Networks



- ◆ While the current fund distribution network is provided by three system vendors, a lot of data is incompatible, and such data is shared among issuers and distributors still via fax and e-mail
- ◆ And as a result, it is manually input into systems.

## 1. Manual intervention and system costs due to data incompatibilities

Many data are not compatible with others and it is necessary to transfer such incompatible data by using e-mail and fax. Since it has become common practice for issuers to use the same network as distributors, multiple contracts are required, which is a burden in terms of cost.

## 2. Unification of master data and data items

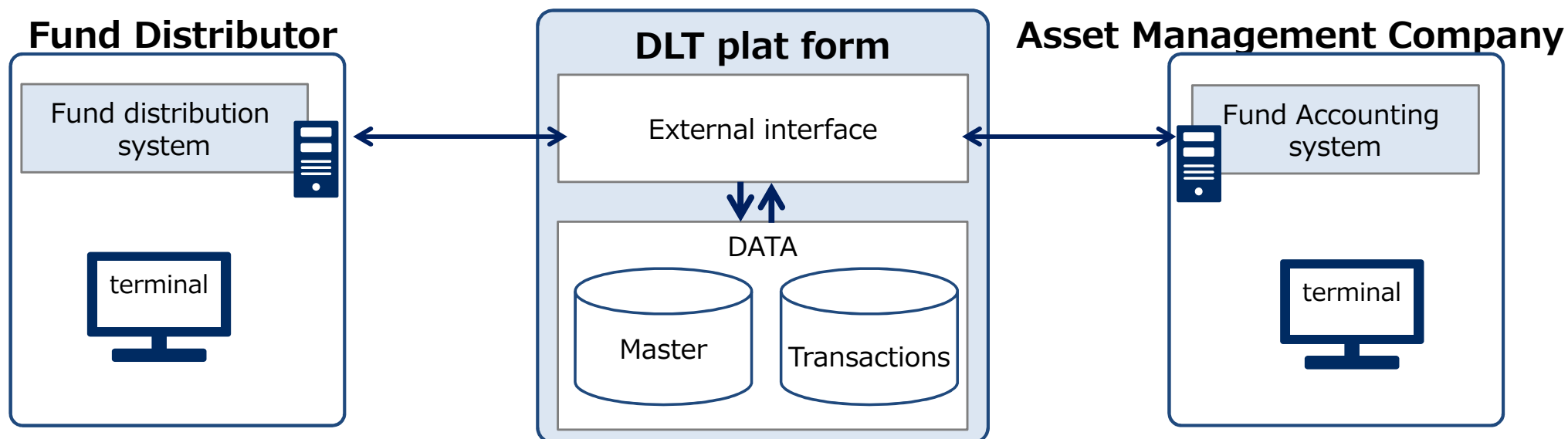
Since master data base are held by each fund distribution networks, double maintenance is required.

## 3. Expansion of data linkage

There is a high remand for data expansion which is not uniformly cooperated as a fund distribution networks . In addition, existing infrastructure does not support information coordination (e.g. the establishment of ETFs between the investment management company and the trustee bank). It is now linked by e-mail and fax.



- ✓ If there is a unified network between distributors and issuers or a platform for sharing information is built and data on distribution of investment trusts are consolidated in compatible data formats, this will reduce the operational burden, system usage cost, and operational risk from unnecessary communications.
- ✓ By resolving the compatibility issue, data can be enhanced more flexibly and operational efficiency will improve. In addition, if we open up the connections by publishing the specifications for APIs, etc., it could lead to users having more options to choose which system to use.
- ✓ However, in order to proceed in this way, we will need to provide added value, including data enhancements, and set a lower usage fee rate so that the benefits exceed the cost of changing to a new system.

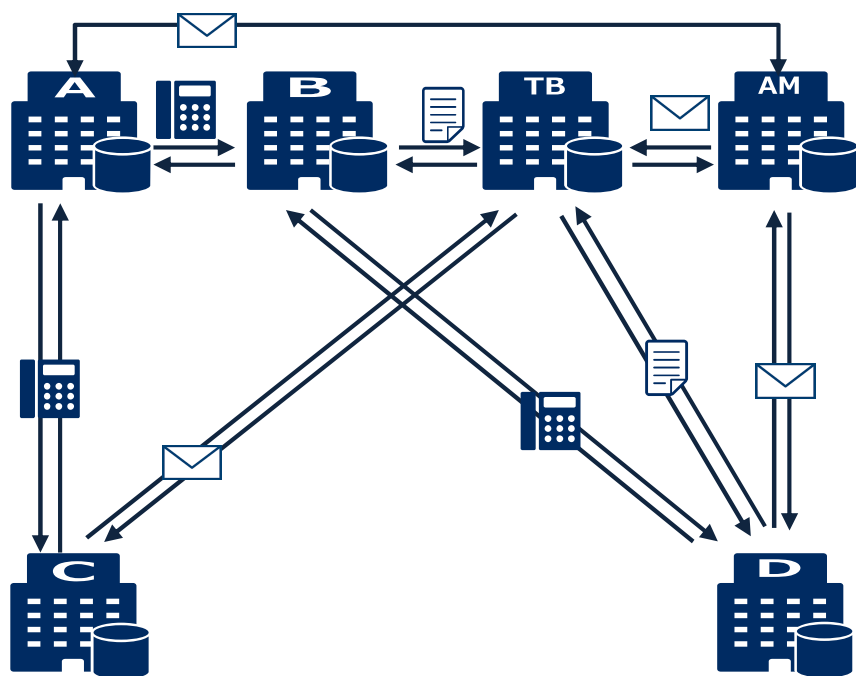


### 3. Future Vision for Operations and IT System in Securities Post-Trade

# Approach to future vision for improving operational and IT system efficiency by utilizing an information sharing platform

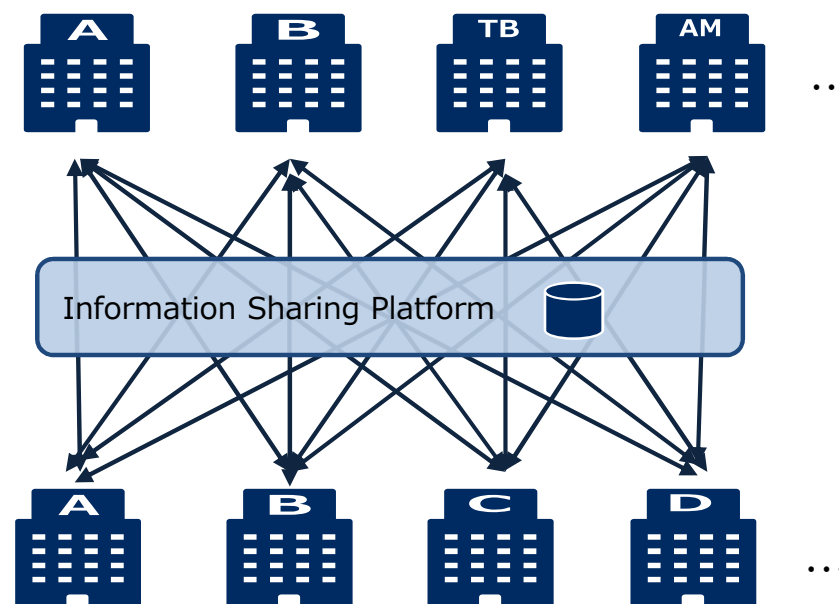
- We recognized that each use case involves inefficiency and operational risk due to the fact that there are many counterparties for sharing information, that different means of communication (e-mail, fax, etc.) are used depending on the counterparty, and that different file formats, including forms and items, are used depending on the counterparty.
- We also understood that these issues could be resolved by utilizing an information sharing platform as an infrastructure for comprehensive securities post-trade information.

Image of current securities post-trade operations



Much communication and sharing of data among related parties (internal/external) is conducted via e-mail, phone, and fax, and is followed by additional operations, including manually inputting information into in-house systems, which is complicated and incurs operational risk. In addition, these involve various formats and items.

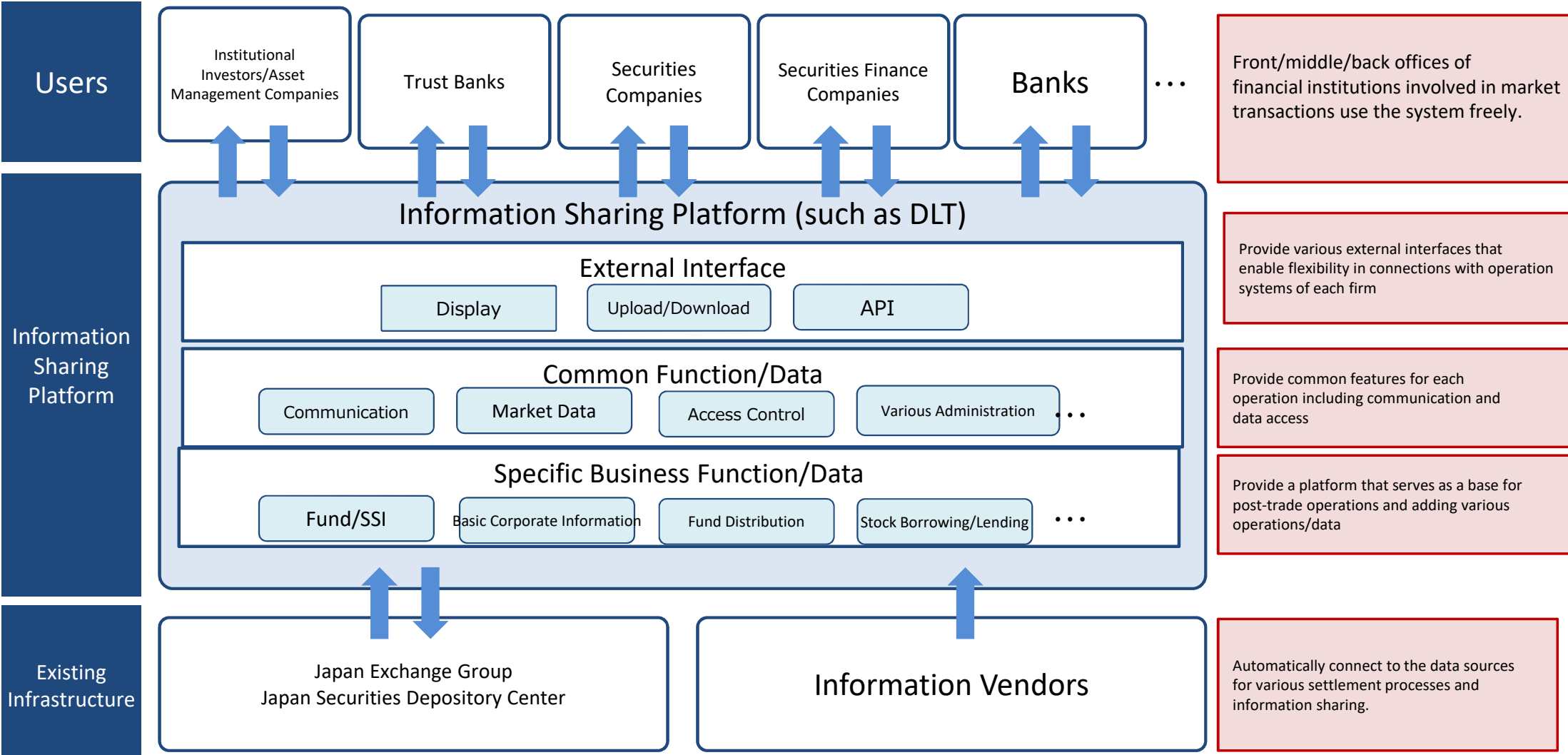
Image of securities post-trade operations that utilizes an information sharing platform



Communicating and consolidating information via an information sharing platform will improve operational efficiency and reduce operational risk. In addition, utilizing a common infrastructure could also lead to standardization of formats, items, and rules.

# Example of future vision for improving operational and IT system efficiency by utilizing an information sharing platform

- The diagram below is an example of a future vision that utilizes an information sharing platform.
- In addition, the platform can be positioned as a base for post-trade operations that can be enhanced in phases by adding operations and systems and can flexibly accommodate future changes.



# Approach to improving operational and IT system efficiency by utilizing an information sharing platform

- While it is possible to resolve the issues of inefficiency in securities post-trade by applying specific alternative means in each use case without an information sharing platform, the advantages of utilizing an information sharing platform are as follows.
- In addition, it is important to work toward resolving such issues while considering the efficiency for the overall industry based on a long-term perspective.

## Improving efficiency of information sharing/communication

- By bringing transaction related information and market data onto a DLT platform, and having the related parties communicate accordingly, we could reduce the dependency on e-mail, telephone, and fax, and this will improve operational efficiency and reduce operational risk.
- For example, by centrally managing fund information, the necessary information, such as trade matching/settlement, and fund distribution, can be shared in a timely manner among each related party without imposing large operational burden even at the time of fund establishment, redemption, and change in attribute.

## Promoting standardization of operations through the use of a sharing platform

- Since transaction pattern and information sharing format will be standardized by conducting operations through a common platform, there will be less specific treatment for each case, and this will improve operational efficiency and reduce cost.

## Absorbing operational differences across the different firms by open architecture

- By constructing a framework that enables information that has been consolidated to be shared flexibly among related party systems based on access permissions and security measures, the information can be shared while absorbing the operational differences across the different firms, and this will lead to improved operational efficiency. In addition, for themes that are particularly suited to DLT, we can expand the framework's features by leveraging the openness and flexibility of DLT.

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# Thank you!

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