

Progress Report No.4

The Digital Currency Forum

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Part 1

Introduction

Since its foundation in 2020, the Digital Currency Forum in Japan has conducted extensive studies on an ideal structure of payment and settlement infrastructure in the coming future. According to the Forum's proposal, yen-denominated and private sector-driven digital currency platform, "DCJPY", was created. In August 2024, the digital currency based on DCJPY was officially launched. The forum extends its deepest gratitude to all the relevant entities and individuals for their dedicated efforts in making the initiative a great success.

Designing an ideal infrastructure in the coming future required deep and extensive consideration on a variety of issues. Since every instrument for payments and settlements has strong "network externalities", where the utility of each user increases as the network of users becomes bigger, it would not be appropriate to build infrastructure like the Galapagos islands, which are isolated from global trends. At the same time, the presence of "network externalities" may accompany the risk that individuals and firms are forced to use suboptimal instruments simply because many of others use them. Therefore, we should make proactive studies for the ideal design of infrastructure with clear vision and principles, in order to approach the optimal equilibrium.

The Digital Currency Forum in Japan has been conducting extensive deliberations on the ideal structure of a payment and settlement infrastructure that can fully utilize new digital technologies to foster economic developments and enhance people's welfare. The Forum has also been making its maximum effort to actively share its discussion outcomes and research findings with public.

The Digital Currency Forum has agreed on several principles of desirable digital currency platform in the coming future, including

1. the stability of value equivalent to legal tender,
2. the promotion of market-based and private sector-driven innovation, and
3. the "programmability"—the technological capacity to incorporate sophisticated programs, such as "smart contracts" for the automatic execution of transactions.

Based on these principles, the Forum designed a digital currency platform with a two-layered structure consisting of its "Financial Zone" for core payment and settlement functions and its "Business Zone" where customized programs can be incorporated so as to satisfy various needs. This two-layered structure was designed to adopt cutting-edge technologies while maintaining the advantages of the current monetary system. The Forum also believed it appropriate that banks be the initial issuers of the digital currency based on this platform.



The “DCJPY”, a private-based and two-layered digital currency platform, was established with being based on these concepts.

Many initiatives and experiments on digital currency platforms similar to DCJPY are now being undertaken in many developed countries including the United States, the United Kingdom, Germany, Italy, Singapore, and South Korea, as well as by international organizations. The digital currencies based on these platforms are referred to as “tokenized deposits,” as they represent commercial banks’ liabilities converted into “digital tokens” through blockchain technology.

DCJPY, based on the proposal of the Digital Currency Forum, can also be regarded as the platform for “tokenized deposits”, since they share the same characteristics, such as being banks’ liabilities while leveraging the blockchain technology. The studies and initiatives taken by the Digital Currency Forum are now in line with those taken by many countries and organizations, and are increasingly forming and aligning with the global standards.

Such global trend toward developing new payment and settlement infrastructure, based on the concept of “tokenized deposits”, reflects a shared understanding of the importance of two-tiered structure of the modern monetary system and the roles of commercial banks in it. Through their extensive studies, many developed countries, entities and organizations have re-affirmed the necessity to maintain the benefits of the current monetary systems while utilizing new digital technologies so as to develop frontiers of economic activities. In particular, there is widespread recognition that the efficient allocation of resources and the adequate provision of money through banks' credit creation functions are the prerequisite

of the economy, and that these functions must be maintained and enhanced in the future.

To maintain the “singleness of money,” which is the foundation of the modern monetary system —where central bank money (base money) and commercial bank money (deposits) are always interchangeable one by one— banks' liabilities are safeguarded by bank regulation, supervision and deposit insurance. The public trust to banks and their liabilities, based on such institutional framework, is now viewed as essential for building digital currency infrastructure capable of processing and executing large-value payments and settlements.

Furthermore, the increasing importance of KYC and AML/CFT, along with growing needs to minimize energy consumption and CO2 emission for operations of payment and settlement infrastructures including transaction verification, are driving the move toward tokenized deposits with “permissioned”-type DLT (distributed ledger technology).

As global efforts progress around tokenized deposits, the issuance of a digital currency based on the DCJPY platform in 2024 marked a significant milestone, providing essential guidance and insights for those involved in innovations leveraging digitalized financial infrastructure.

Needless to say, there remain issues and areas that need to be addressed, and the Forum will continue studying on and finding the solutions of them, aiming at developing the digital currency infrastructure into a core component of the economy.

First, the Forum will continue exploring and developing various use cases of digital currency in order to enhance the efficiency of transactions and to foster economic activities. Since it is expected that multiple banks will issue digital currencies in the coming future, it will strongly be needed to innovate interbank settlements arising from transactions with those digital currencies. One promising approach is to use blockchain and DLT to automatically synchronize payments made by companies and individuals with the corresponding interbank settlements. The Digital Currency Forum will continue making its efforts to build such infrastructure automatically synchronizing various transactions, payments and settlements, with collaborating closely with the relevant stakeholders.

Second, new digital assets such as security tokens and non-fungible tokens, which are created through tokenization of various assets, rights and values via blockchain and DLT, are similar to tokenized deposits in terms of applied technologies. Many developed countries and international organizations are now doing studies and experiments on the transactions of various digital assets and digital currencies in a synchronized manner on integrated or connected platforms. These platforms are entitled as “Unified Ledger”, which enables seamless transfer of digital assets and their corresponding digital currency payments, efficient DVP (delivery versus payment) and automated execution of related administrative tasks. The Forum will also do such studies and experiments proactively.

Third, the Digital Currency Forum will continue making its efforts to ensure the same level of legal stability and certainty for holding and transferring digital currencies issued as banks’ liabilities, as provided for deposits.

With the issuance of the very first digital currency on DCJPY platform as a significant step forward, the Digital Currency Forum will continue to address various issues and challenges, to establish efficient financial infrastructure incorporating new digital technology, and to contribute to the developments of the economy.

Hiromi Yamaoka
Chair, Digital Currency Forum

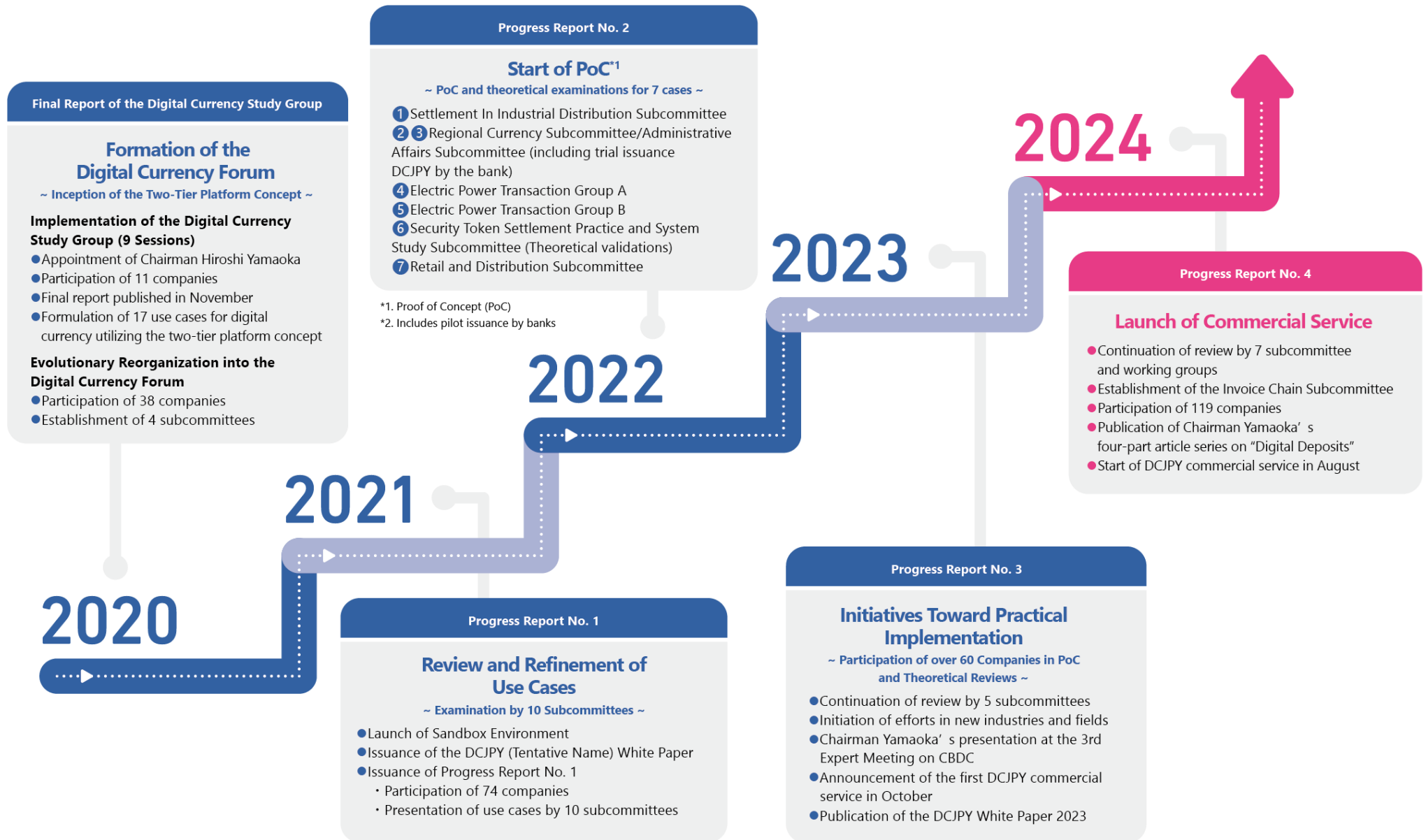


Figure 1: Progress of the Digital Currency Forum's Efforts Toward DCJPY Societal Integration

Part 2 Special Interview on the DCJPY Live Project

The Future of Environmental Value Transactions with DCJPY

In recent years, efforts toward decarbonization have increased globally, and Japanese companies are actively pursuing Green Transformation (GX) initiatives. Within this trend, the digital currency DCJPY (hereafter referred to as DCJPY) launched its first case which is "environmental value transactions and DCJPY payments" in August 2024. Today, the Digital Currency Forum secretariat spoke with Mr. Yamai of Internet Initiative Japan (IIJ), a participant in the Digital Currency Forum and a key driver of this project, about DCJPY's potential from the perspective of environmental value transactions, prospects, and expectations of the Digital Currency Forum.



Yoshikazu Yamai

Internet Initiative Japan Inc.
Managing Executive Officer, Division
Director of Infrastructure Engineering
Division

Since joining a shipping company in 1983, he has gained experience as a foreign computer manufacturer and an international telecommunications operator. In 1999, he joined IIJ and launched Crosswave Communications, Inc. He is responsible for overseeing the operation of the IIJ's service infrastructure, primarily focusing on the promotion of data center operations at IIJ.

Secretariat: Could you please provide an overview of the "DCJPY Payment for Environmental Value Token Transactions," which launched in August 2024?

Yamai: At the IIJ Data Center, electricity is supplied to customers in rack units based on their applications. IIJ is a member of JEPX (Japan Electric Power

Exchange) for non-fossil value transactions and can procure non-fossil certificates (certificates verifying that electricity is generated from renewable sources, equivalent to reducing CO₂ emissions). Thus, we plan to procure these non-fossil certificates on behalf of our customers and allocate them based on the amount of electricity consumed. In this project, non-fossil certificates are tokenized as environmental value, and payments for transactions are conducted using DCJPY. Under current regulations, non-fossil certificates cannot be resold on the secondary market, but we've decided to adopt tokenized environmental value and DCJPY payments in anticipation of future environmental value trading.

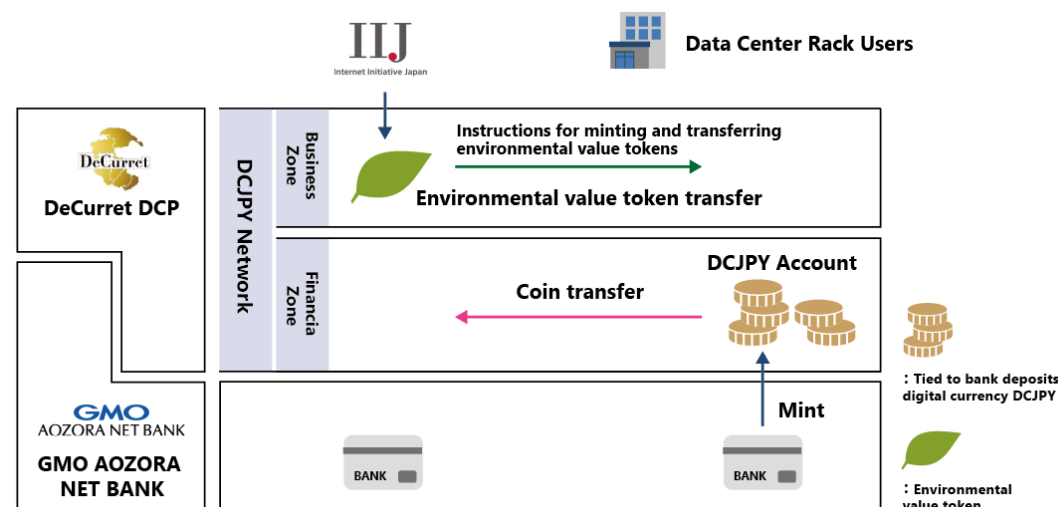


Figure 2 : Funds Flow on the DCJPY Network for Environmental Value Token Transaction

Secretariat: Environmental value trading is a highly regarded field in Japan. However, as it is still in its early stages, further legal and technological

developments are necessary for the market to mature. Could you explain why you decided to enter this field at such an early stage?

Yamai: IJ opened a container-type data center in Matsue City, Shimane Prefecture, with outdoor air cooling in April 2011. Since 2008, we have been developing various technologies to use electricity efficiently and reduce energy consumption in data centers, which require large amounts of power. Naturally, these discussions included the topic of decarbonization, and we recognized that the use of environmentally friendly electricity would hold future value. Previously, we studied related systems.

In Japan, environmental value-trading systems were still underdeveloped; therefore, we mainly focused on gathering information. However, as concerns over the electricity consumption of AI and data centers have grown recently, we have realized that it is necessary to act quickly to create a system that benefits society through environmental value. Therefore, we adopted the DCJPY network at an early stage.



Secretariat: The DCJPY network is based on the blockchain technology. How do you think this benefits the environmental value transactions?

Yamai: It all comes down to traceability. To know who receives the electricity and its origin, tracking something akin to a “Guarantee of Origin (GO)” is essential. Considering such future systems, blockchain’s ability to track and manage the entire process on a transparent ledger is its greatest advantage. Moreover, I anticipate that society will move toward trading various kinds of added value beyond environmental value. For example, the supply chain often raises questions regarding where and how products are made. Blockchain is appealing because it can provide that traceability and control.

Secretariat: As you adopt the DCJPY network, what would you say is the main attraction of DCJPY?

Yamai: The two-tiered structure model is its biggest appeal. This goes beyond simply moving money; it allows for the separation and independent movement of associated tokens. In the energy supply world, balancing generated power with demand requires control in 30-minute intervals, but these intervals will shorten over time. When rapid electricity procurement and payment are needed, smart contracts can enable instant, automated settlement, which is a major advantage. Additionally, being built on a digital infrastructure opens up possibilities for applying this system to similar transactions.

While payment is a financial transaction, the DCJPY network also resembles a barter system, in that values can be exchanged if they are mutually considered equivalent. By integrating money and various values, the DCJPY allows for both synchronous and asynchronous flows of value and money. Expanding the DCJPY usage and collaborating with users to explore new use cases are crucial. I am optimistic about the future, especially with the active discussions

———— The Potential of a New World Created by the Exchange and Circulation of Tokenization

occurring in the Digital Currency Forum subcommittees.

Secretariat: What knowledge or expertise do you think companies can gain by participating in digital currency forums?

Yamai: Although it may be challenging for competitors to openly discuss certain matters, the Digital Currency Forum provides a unique opportunity for various industries and sectors to exchange ideas and explore innovative projects. Sometimes, a company notices something first, whereas at other times, it becomes apparent only when viewed from another company's perspective. For instance, other companies may initially struggle to understand IJJ's new initiatives, but participating in the subcommittees can deepen their understanding. I hope that this exchange of insights among participants continues, leading to shared knowledge and mutual growth. Additionally, a new world can be created through DCJPY payments and the exchange of tokenized value automatically circulating within a digital ecosystem. Rather than wondering, "Can we do this?" I hope that the Digital Currency Forum will inspire more conversations along the lines of "Let's try doing this."

Secretariat: Lastly, could you share a message for the Digital Currency Forum?

Yamai: I have been personally interested in blockchain-based transaction systems since before the establishment of the Digital Currency Forum. I'm delighted to have contributed to creating the concept, advocating for the two-tier model, and supporting its implementation.

To expand its adoption further, we must make the system even more open and accessible. We should aim to develop a platform that people in various sectors, from primary industries such as agriculture to tertiary industries, can participate in. I hope the Forum will communicate this system and its vision more clearly, making it accessible to a broader audience.



Part 3 Initiatives for the Real-World Deployment of DCJPY

1. Electric Power Transaction Subcommittee

-Promoting Carbon Neutrality through the Utilization of Digital Currency-

Research and Examination of the Environmental Value Token Market Expected to Be Revitalized by Digital Currency

The Electric Power Transaction Subcommittee is utilizing the yen-denominated bank-issued digital currency (DCJPY) for settlements related to the buying and selling of electricity and environmental value. This includes the automatic attachment of proof for utilizing the electricity generated from renewable energy and the demonstration of purchasing goods and services using DCJPY obtained from the sale of electricity or environmental value. Through these efforts, we are exploring new business models aimed at decarbonization.

By applying blockchain and distributed ledger technologies, it is possible to track how electricity is generated and the evaluations it receives, thereby contributing to businesses that promote carbon neutrality. Until now, when trading electricity generated from renewable energy, we have been transferring "electricity tokens" and "environmental value tokens" linked to green energy in the business zone to clarify the procurement and trading of energy compatible with decarbonization and to advance related initiatives.

Consequently, companies can effectively choose and procure green energy, while also improving the efficiency of related administrative tasks. Additionally, it is easier to prove that their corporate activities are consistent with carbon neutrality, which could extend to areas such as green finance for corporate fundraising. These activities are expected to become increasingly important as countries, including Japan, advance their efforts toward achieving carbon neutrality.

■ Exploration of the Environmental Value Token Market Using Digital Currency as a Means of Payment

In this subcommittee, we examine the application of the DCJPY to real-time, seamless settlements in electricity and environmental value transactions on a peer-to-peer (P2P) electricity-trading platform and conduct proof-of-concept (PoC) studies on this mechanism.

During the 2023 review, we proposed scenarios in which companies and individuals could hold, trade, and use digitized environmental values as an approach to facilitate the secondary circulation of environmental value. For digitalization, we focused on tokens that can also be utilized on P2P trading platforms and looked into the tokenization of nationally recognized environmental value certificates, such as Non-Fossil Certificates and J-Credits, to explore options for their secondary circulation.

We began by investigating and gaining an understanding of both domestic and international types of environmental values, the status of their trading markets, and business trends surrounding tokenized environmental value. To streamline the discussion points on tokenized business models for the Electricity Trading Subcommittee, we collated challenges and questions from all participating companies, receiving over 40 opinions. This input allowed us to comprehensively identify the items for consideration from various industries and perspectives. The results of the organized discussion are listed in Table 1.

① – 1	How should we view the necessity, advantages, and disadvantages of tokenization?
① – 2	Use cases for environmental value tokens
② – 1	What are the challenges faced with existing types of environmental value, and can tokenization help address them?
② – 2	How should we approach the types of environmental value to be tokenized?
③ – 1	How can small businesses and individuals be enabled to generate and utilize tokens?
③ – 2	What can be done to make it easy for individuals to use?
③ – 3	How should we consider defining new (additional) value equivalent to environmental value?
④ – 1	What regulations need to be considered when handling tokens?
⑤ – 1	Who is expected to conduct what type of business using tokens?
⑤ – 2	What elements are necessary for commercialization?

Table 1 Discussion Points:

To explore these points, we conceptualized a goal model as illustrated in Figure 3. This model envisions a business structure in which the originators and buyers (or resellers) of carbon credits trade tokenized environmental value on the market, using digital currency as a payment method. This approach focuses on the transaction aspect of environmental value tokens, with an emphasis on secondary trading, and involves examining institutional frameworks and various other issues to facilitate these transactions. While other business models involve environmental value-token trading, the model developed by the Electricity Transaction Working Group is distinguished by its use of digital currency for payments, which allows for its extension to various service utilization methods. In Figure 3, the "Financial Zone" represents the area handling digital currency transactions, while the "Business Zone" represents the area that manages the

transfer and processing of environmental value and tokens.

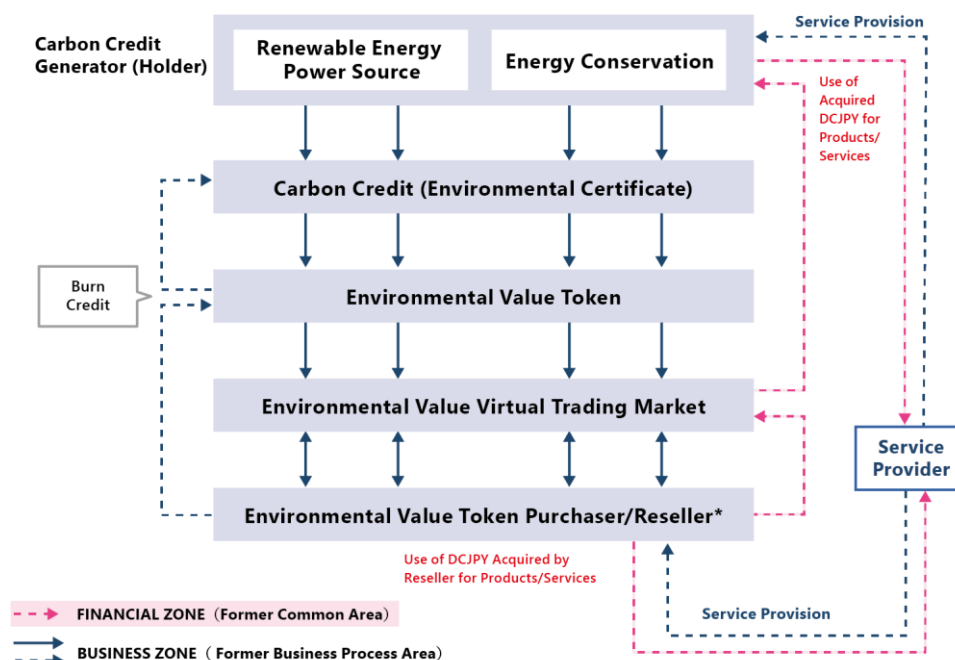


Figure 3 : Hypothetical Business Model for Environmental Value Tokenization, "Financial Zone," and "Business Zone"

After refining this business model by reviewing each discussion point and consulting members of the Electricity Transaction Working Group, we identified the specific issues associated with each operational aspect, as outlined in Table 2. In addition, we consulted experts on regulatory and institutional matters. We received an opinion suggesting that, as long as environmental value tokens are classified as "goods" and payments are made with digital currency, it is likely that they do not fall under the category of "crypto assets."

Category	Business Activity	Challenge
System/Facility Development (Cost Reduction)	Environmental Value Creation	Cost reduction for devices and data recording (blockchain) systems to measure and transmit the environmental value generated by each company or household
	Tokenization	Reducing system costs associated with tokenization
	Trading	Reducing costs associated with the trading system (market) (transaction fees)
	Settlement	Reducing costs associated with the settlement platform
Architecture and Technology	Tokenization	Need for examining the design of tokens (minimum trade unit, number of units, types to be grouped under the same token)
	Tokenization	Maintaining the intrinsic value of tokens
	Tokenization	Security measures required
	Settlement	Addressing the increase in transaction volume
Operations and Services	Environmental Value Creation	Need for centralized operational management of environmental value
	Environmental Value Creation	Need for reviewing rules for aggregating environmental value
	Tokenization	Addressing the risk of token value depreciation (requiring social recognition of environmental value and expansion of users)
	Tokenization	Addressing resistance to token operation (such as requiring compensation in case of token impairment)
	Trading	Need for reviewing rules for reselling environmental value tokens (trading must be possible at any time)
	Settlement	Need to ensure that digital currency is compatible with a variety of services (requiring the participation of many service providers in the digital currency economy)

Table 2: Overview of Challenges in the Environmental Value Token Business

Future Initiatives

In this investigation of the environmental value-token market, we identified key challenges for conducting environmental value-token businesses, which we believe will aid business development. We will continue to explore business models using DCJPY, further promoting the integration of DX (Digital

Transformation) and GX (Green Transformation) in the energy sector, with the goal of launching practical services that support companies in their carbon neutrality efforts.

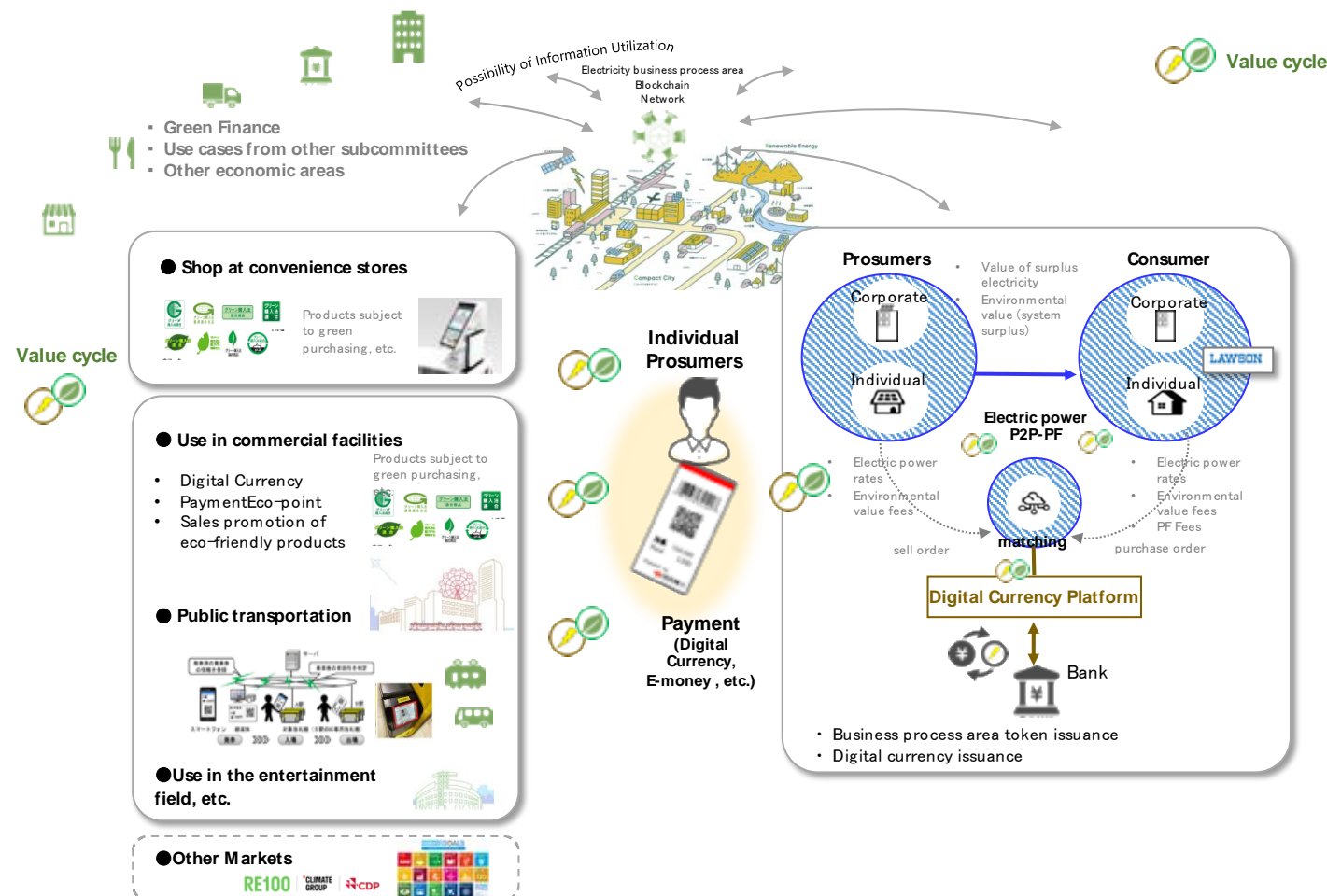


Figure 4: Vision of the of the Electric Power Transaction Subcommittee

■ Participating Companies

- The Kansai Electric Power Company, Incorporated (Lead Company)
- Internet Initiative Japan Inc.
- ENERES Co., Ltd.
- KYOCERA Corporation
- DAIDO LIFE INSURANCE COMPANY
- Chubu Electric Power Co., Inc.
- TOKYO METROPOLITAN GOVERNMENT
- Panasonic Holdings Corporation
- Hankyu Hanshin Holdings, Inc.
- BIPROGY Inc.
- Lawson, Inc.

Comment from an Expert

Partner at Mori Hamada & Matsumoto, Adviser of Digital Currency Forum

Masakazu Masujima

As the momentum for transitioning to a decarbonized society accelerates in response to climate change, various initiatives are being trialed overseas on the tokenization and circulation of environmental value, primarily through Voluntary Carbon Credits (VCC).

Another system is being devised that would convert real-world assets (RWA), such as forests, into NFTs, thereby allowing environmental value to be returned to NFT holders.

The Electric Power Transaction Subcommittee is exploring ways to tokenize Non-Fossil Certificates and J-Credits for secondary distribution based on a thorough study of various international cases and pioneering examples within Japan.

I hope that the working group will successfully tackle the many challenges ahead, such as how to legally tokenize Compliance Carbon Credits, which were initially designed without blockchain technology in mind, and how to design a secondary market. Overcoming these challenges will pave the way for establishing a business ecosystem on the DCJPY platform that allows for the smooth exchange of environmental value.

Part 3

2. Regional Currency Subcommittee

Aiming to Address Regional Challenges and Revitalize Local Communities with Digital Currency

Creating a New User Experience with a Token-Based Tourist Access Pass

-Examining the Integration of Business and Financial Services through the Digital Currency "DCJPY"-

The Regional Currency Subcommittee includes over 40 companies and local governments actively working to address regional challenges and revitalize communities using the DCJPY. This subcommittee aims to establish a digital regional currency that satisfies the following three elements, while supporting various use cases such as "Self-Help and Community Cooperation (Behavioral Transformation)," "Broader Population Engagement (External Influx)," "Economic Activation (Local Circulation)," "Business-to-Business Circulation,"

and "Government Collaboration."

- ① A digitized currency that visualizes the regional economic status
- ② Information tied to the visualized currency can be used for subsequent actions
- ③ Automated digital value transfer and settlement

Through previous PoCs, such as simulated childcare benefit coupons carried out in 2021,^{*1} and business-to-business settlements for initiatives in Aizuwakamatsu City, including a health monitoring project and an agricultural seller-buyer matching service in 2022,^{*2} we examined the potential of implementing the DCJPY in reality. Last year (FY2023), our activities focused on expanding the population involved from outside the region. Based on theme selection and discussion with participating companies and organizations, we identified the "Tourist Access Pass" as a suitable use case for examining the digital regional currency's impact on "Expanded Population" because of its properties:

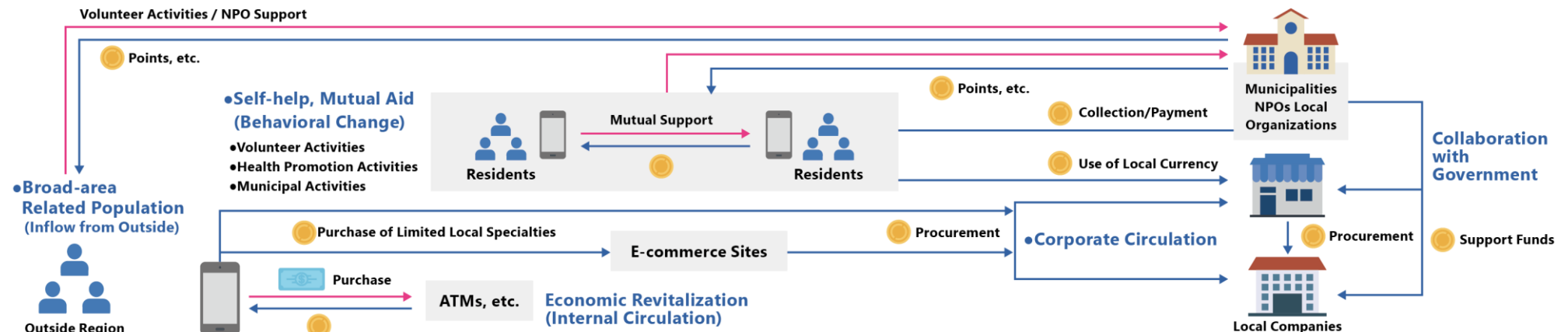


Figure 5: Use Cases of Local Currency

- Usable only in specific areas (similar to regional currency)
- Aims to increase inbound tourism and revitalize the area

From the perspective of AMIC, which is a core service element of the DCJPY, we focused on A (sset) and C (ontract) in the previous fiscal year (FY2023), and examined and evaluated how the unique elements of digital currency, such as Asset as a token and Contract as programmability, can be effectively used in the use cases and issues of local currency.

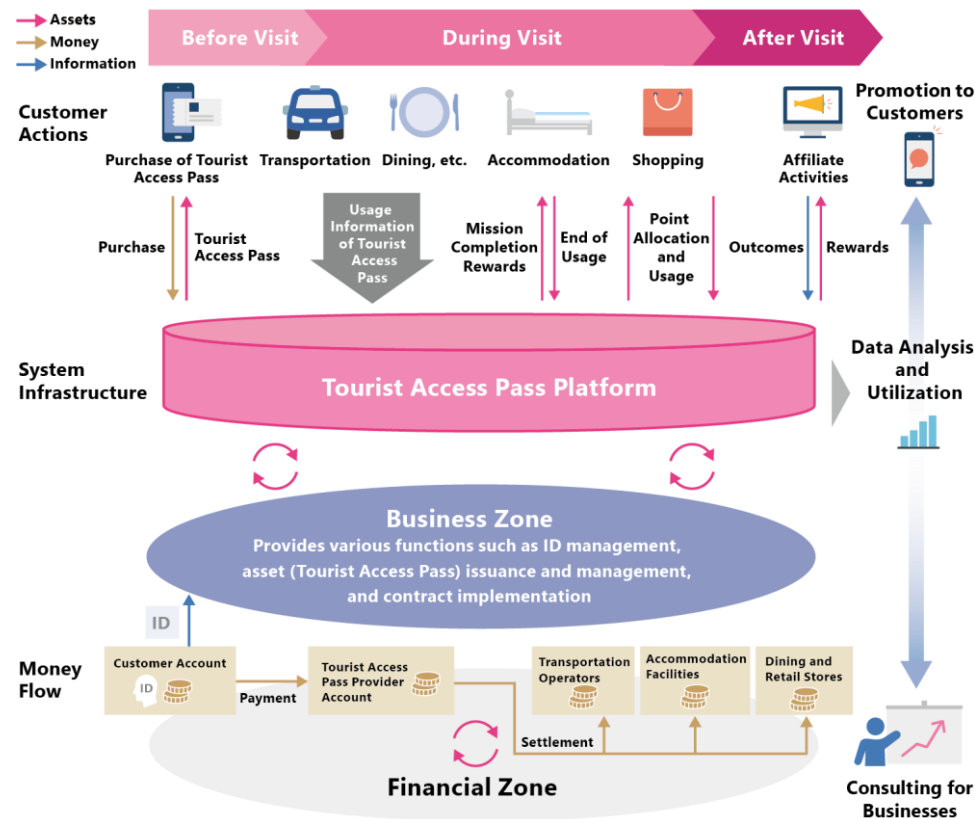


Figure 6: Future Vision of Token-Based Tourist Access Pass

With this in mind, we conducted a technical verification of a token-type Tourist Access Pass using the DCJPY on March 21, 2024. Specifically, we implemented a Tourist Access Pass that allows unlimited rides on trains and buses for a fixed fee using tokens. We also verified the automation of complex

	STEP	OVERVIEW
1	Purchase Tourist Access Pass	The user sends digital currency to the Tourist Access Pass provider to purchase a Tourist Access Pass.
2	Tourist Access Pass Usage	The user presents the Tourist Access Pass to transportation operators to access transportation services.
3	Points Rebate/Settlement	If the user does not use the full amount of the Tourist Access Pass, the remaining balance is refunded as points to the user, and the transportation operator is compensated for the amount used.
4	Purchase Souvenirs with Points	The user can purchase souvenirs at stores using these points.
5	Convert Points to Digital Currency	The store converts the points back into digital currency.

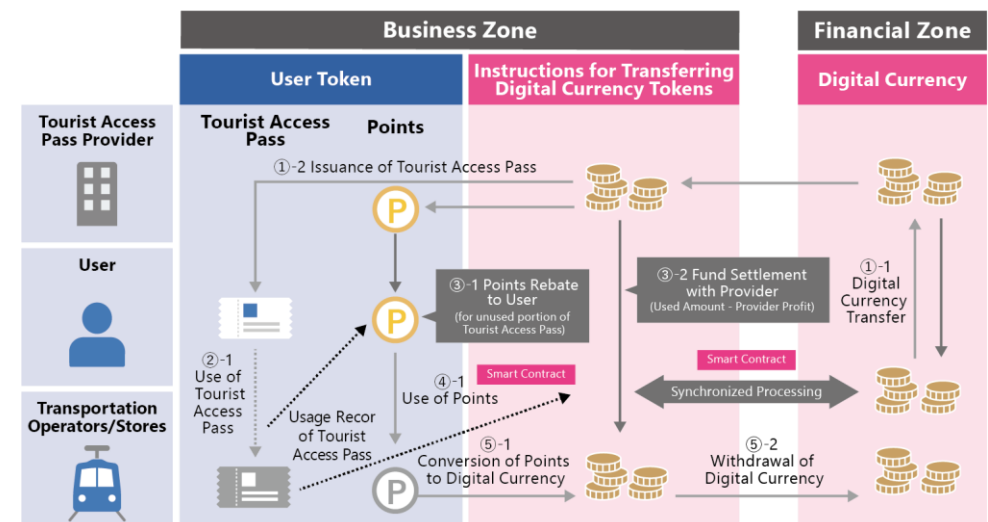


Figure 7: Scenario and Token Flow of FY2023 Technology Demonstration

administrative processes (e.g., settlement of accounts based on usage status for transportation and stores, point back for unused portions for users, and granting rewards for referrers) using the smart contract of DCJPY.

The main scenario is illustrated in Figure 7. In this technical verification, we programmed the allocation logic for the purchase price, the calculation of unused amounts and the timing of point back, the conditions for granting referral rewards, etc., in advance on the DCJPY smart contract, and verified a system that automatically executes when the conditions are met. We confirmed the technical feasibility of automating and saving labor for basic use cases related to tour passes by using smart contracts on the DCJPY Network. We also identified a number of issues related to implementing tour passes as a service in society, including issues outside the scope of this verification.

■ Future Initiatives

The DCJPY can synchronize commercial transactions, contractual actions, and payment settlements, enabling the integration of business and financial services and driving significant changes in the economic landscape. The previous year's (FY2023) demonstration was a glimpse of this potential, and the subcommittee will continue to delve into these challenges.

The Regional Currency Subcommittee includes not only companies that offer regional currency services as part of their business, but also local governments, major local companies, and financial institutions aiming to revitalize regions through digital transformation (DX). Building on the insights gained thus far, we will revisit the effectiveness of the DCJPY with these participating organizations in FY2024 and continue discussions and trials to expand and deepen the reach of the digital regional currency.

*1 Please refer to the following for more information about the PoC that simulated childcare benefit coupons conducted in FY2021.

Press release from Aizuwakamatsu City and the General Incorporated Association AiCT Consortium.
<https://www.aict.or.jp/blog/368b3ccb37e>.

Press release from Kesennuma City
<https://www.kesennuma.miyagi.jp/sec/s002/020/030/050/020/100/12/20220323sangyousenryakuka.pdf>

*2 PoC in Aizuwakamatsu, 2022.

Press release from Association AiCT Consortium
<https://www.aict.or.jp/blog/368b3ccb37e>

Comment from an Expert

Professor, Graduate School of Business and Finance, Waseda University,
 Advisor of Digital Currency Forum

Kenji Saito

The Regional Currency Subcommittee is one of the most active groups in this forum, and I have been following its activities with great interest. The DCJPY, a deposit token based on bank deposits, can be circulated widely or programmed to restrict its usage within specific regions. This not only aligns with the original purpose of regional currencies—to prevent money from leaving the area—but also opens up possibilities for addressing challenges within regions and surrounding areas.

It is particularly noteworthy that the subcommittee has now begun a technical demonstration of tokenizing sightseeing passes to address the key question of how to increase the number of people involved in the region, which is the key to sustainable community development. I will continue to keep an eye on the activities of the Regional Currency Subcommittee.

Part 3

3. Administrative Affairs Subcommittee

- Promoting Administrative Digital Transformation (DX) through Digital Currency – Aiming to achieve “Once Only” and “Connected One-Stop” with the DCJPY Network

The Administrative Affairs Subcommittee is examining the use of the DCJPY to promote administrative digital transformation (DX) and improve the efficiency of administrative tasks, particularly those involving the transfer of funds, such as tax payments and the distribution of various benefits and subsidies. In FY2021, with the cooperation of Aizuwakamatsu City and Kesenuma City, we conducted a PoC on the issuance of coupons, simulating special temporary benefits for childcare support*1. In FY2022, with the cooperation of the Tokyo Metropolitan Government, we conducted another PoC related to subsidies for businesses*2. The PoC leveraged the characteristics of the DCJPY, including significant improvements in administrative workflows aligned with financial flows, control over the use of grants, the traceability of payment recipients, and immediate fund settlements.

The subcommittee also explored use cases that leverage the DCJPY Network's Business Zone, focusing on comprehensive data utilization, broad system interconnectivity and automation, and the realization of multistep fund distribution across multiple payment processes.

Specific considerations include the realization of prompt and accurate disaster relief payments in collaboration with administrative portal applications and the use of local government data linkage platforms to provide incentives for behavioral change.

Various government-led DX initiatives have been advanced. For example, in FY2023, tax payments using Unified QR Codes for Local Taxes" were introduced. In February of this year, a "Benefit Support Service" was launched, allowing the entire process, from benefit application to payment, to be completed digitally.

Furthermore, the Digital Government Promotion Act (Act on the Advancement of Government Administration Processes That Use Information and Communications Technology) enacted in December 2019, made online procedures the principle for national procedures and established three basic principles for promoting digital government: "Digital First," "Once Only," and "Connected One-Stop." The subcommittee will take up this theme again and consider how DCJPY can contribute to this trend of government DX. In July 2024, we held a panel discussion moderated by Mr Yasui, CEO of Asukoe Partners, Inc and invited an expert in the field of government DX ; Mr. Taki, Group Executive Officer of Money Forward, Inc., Mr. Murabayashi, President and Representative Director of DeCurret DCP Inc., . with TOPPAN Edge Corporation's Takada, who is the lead of subcommittee.

The debate among the panelists focused primarily on three key perspectives. The latter half of the session saw active audience participation, with discussions extending beyond the scheduled time, resulting in a highly productive event.

① Improving the Efficiency and Transparency of Administrative Budget Execution

Traceable money can contribute to reducing budget execution costs, ensuring transparency, and verifying the effectiveness of policies, especially in processes that flow from the national to prefectural to municipal levels.

② Digitally Completing Administrative Workflows Across Multiple Stakeholders

Despite the digitalization of front-end services such as tax payment and vaccination subsidies, many back-end processes remain analog. Digital tokens can enable the complete digitalization of these workflows.

③ Providing "Connected One-Stop" and Ultimate "Push-Style"

Administrative Services

Administrative systems accumulate data across all life stages, from marriage and childbirth to health, medical care and long-term care. By utilizing the DCJPY network to link this data, the concept of "subscription-style" government services becomes a possibility.

A key outcome of this panel discussion was the shared vision among participants to support and realize the "Digital Government 4.0" (Figure 8), proposed by stakeholders, using the DCJPY network. This vision presents a future model for administrative DX.

Future Initiatives

Going forward, the subcommittee will continue to actively work with forum member companies to materialize the various insights gained from this discussion into use cases. The aim is to achieve "Once Only" and "Connected One-Stop" administrative services through the DCJPY network, transcending simple digitalization.

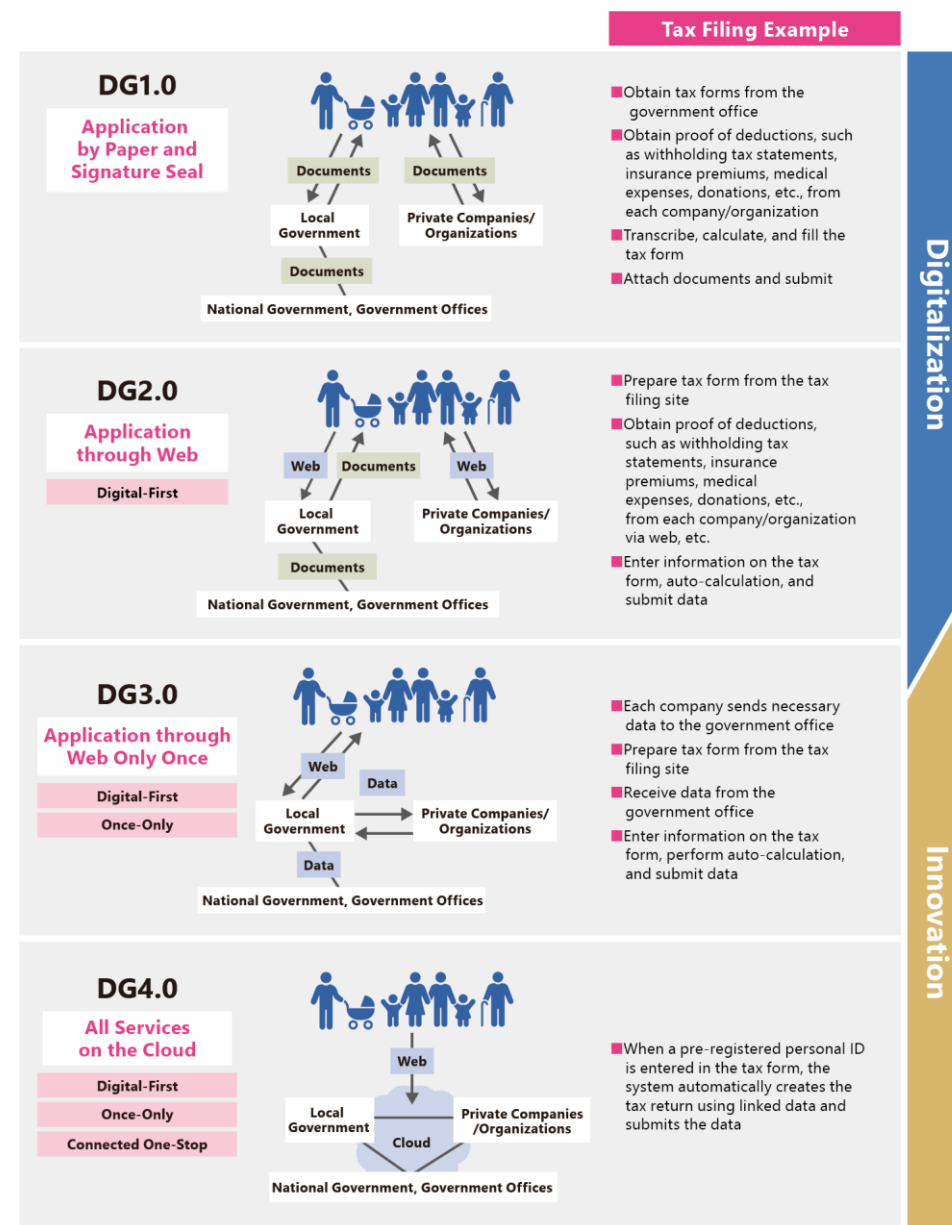


Figure 8: Digitalization and Innovation in Digital Government

Source: Extracted from Cabinet Office's Economic and Fiscal policy-Council for Promotion of Regulatory Reform 30th meeting, edited by DeCurret DCP

*1 PoC simulated childcare benefit coupons conducted in FY 2021

Press release from Aizuwakamatsu City and

the General Incorporated Association AiCT Consortium

<https://www.aict.or.jp/blog/368b3ccb37e> Press release from Kesennuma City

<https://www.kesennuma.miyagi.jp/sec/s002/020/030/050/020/100/12/20220323sangyousenryakuka.pdf>

*2 Poc on subsidies for enterprises using DCJPY in FY2022 Press release from Decurret DCP Inc

<https://www.decurret-dcp.com/news/nl-20230329-gyosei.html>

Comment from an Expert

Professor, School of Political Science and Economics, Meiji University, Advisor of Digital Currency Forum

Shuji Kobayakawa

When exploring use cases for digital currency, it is important to begin by considering various government-related transactions such as G2B and G2C. The subcommittee is advancing grounded initiatives from this perspective. Additionally, pilot experiments have been conducted in cities such as Aizuwakamatsu and Kesennuma utilizing childcare support coupons. I believe it is also important to expand these digital governance efforts from local areas to the central level, and to broaden these localized "point" initiatives into widespread "surface" activities. I look forward to seeing the initiatives of this subcommittee applied more widely.

Part 3

4. Retail and Distribution Subcommittee

Building on Past Achievements to Enter a New Phase

The Retail and Distribution Subcommittee resumed its activities after conducting a PoC for “DCJPY Settlements for Intercompany Commercial Transactions” in June 2022. Past activities focused primarily on one-on-one corporate transactions, confirming through the PoC that automated processing was feasible for regular transactions between two companies using a Distribution BMS.

However, irregular cases involving returns, refund processing, and rebate handling remain on the agenda as areas needing further exploration.

Currently, efforts are underway to address these challenges and extend support for a broader range of transactions. Specifically, the subcommittee is exploring multi-company transactions, with the goal of enabling automated DCJPY settlements for each transaction across the supply chain. The subcommittee is also examining which domains and processes would be best suited as a first step toward implementing automated processing in society.

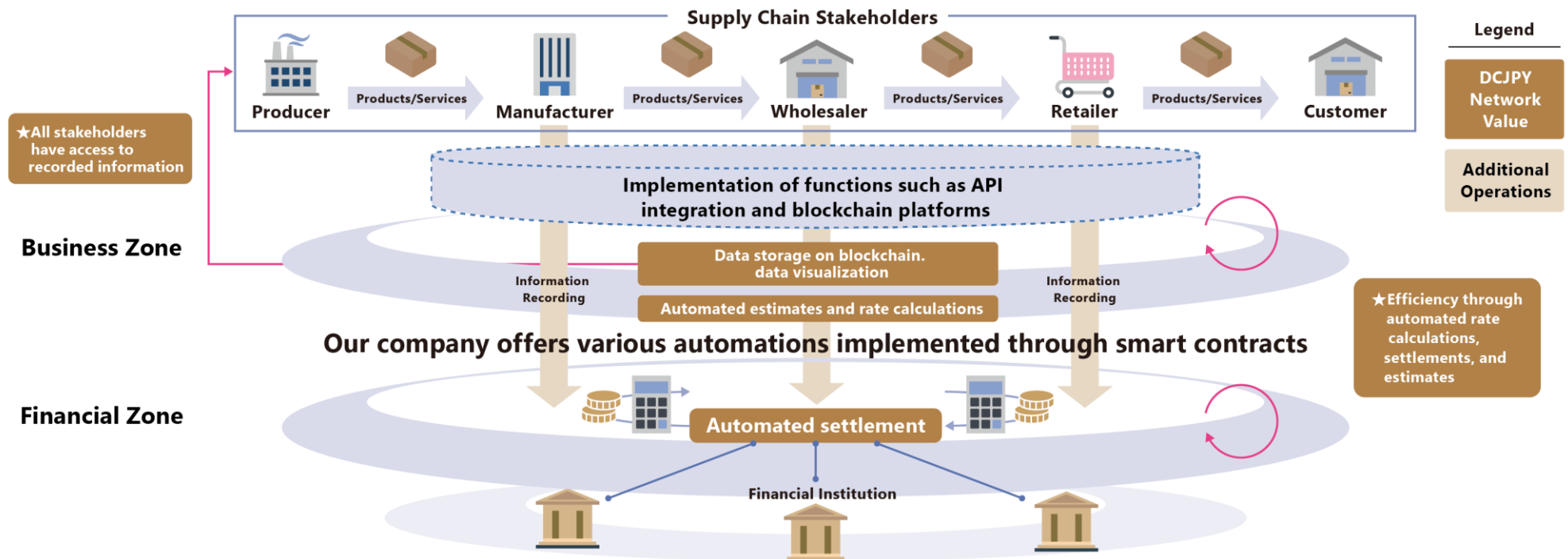


Figure 9: Future Vision of the Supply Chain to Achieve Automation with DCJPY

Moreover, as part of the vision to create a valuable retail industry for end consumers, the subcommittee uses Society 5.0* as a guiding benchmark. This vision involves strengthening the supply chain through AI and Web 3.0, making all relevant data accessible, and ultimately realizing automated processing through the DCJPY within the supply chain.

Currently, while some data are shared among companies, much of the data remain within each company's internal systems. The subcommittee envisions that if the information collected by each company could be recorded on the blockchain and shared securely and immutably, the automation of estimates and billing calculations would be possible. Companies can then conduct operations while verifying logic and calculations. Furthermore, as all stakeholders confirm the generated data, it would be possible to extend this process to automated settlements.

Expected Benefits of the Retail and Distribution Subcommittee's

Supply Chain Vision Improved Transparency

Real-time Tracking: All transactions are recorded on a blockchain in real-time, enabling instant access to all stakeholders and enhancing transparency.

-Tamper Resistance : The immutable nature of blockchain ensures the reliability of the transaction data.

Real-Time Data Sharing

Recording and sharing retail sales data in real-time on the blockchain allows manufacturers and suppliers to gain immediate insights into sales trends, facilitating agile production planning.

Automated Settlements

- By leveraging transaction and sales data alongside smart contracts, the payment process is automated, ensuring faster and more secure transactions.
- Automated settlements increase transparency and reliability, reducing errors and delays from manual processing.
- Payment and billing statuses are updated in real-time, making it easy for all stakeholders to manage cash flows efficiently.

Reduced Administrative Costs

- Automation decreases the need for manual administrative tasks and audits, thus reducing associated costs. This increased efficiency enables human resources to focus on strategic activities.

Customer Benefits

- Responsive Service: Decision-making based on real-time data improves responsiveness to customer needs.
- Customized Services: Services can be tailored based on the customer purchasing history and demand forecasting.

Initiatives to Advance Implementation

Currently, the subcommittee is advancing discussions while organizing transactional relationships across the supply chain. The Retail and Distribution Subcommittee includes companies from diverse industries, and invites them to propose ideas for service and business expansion. The scope of these discussions is extensive, addressing topics ranging from direct-to-consumer e-commerce to challenges in cash infrastructure for store operations, given the rising maintenance costs associated with population decline.

To realize these proposals, the subcommittee is examining system construction methods and data structures, with plans to integrate them into the DCJPY network. Given the diverse themes within the supply chain, we are forming subgroups based on insights and areas of high interest from each company, accelerating the pace of discussion to advance concrete business proposals.

(Current Subgroups)

- ① **Direct Sales by Manufacturers: Product sales on e-commerce sites**
- ② **Retail Sales: In-store sales and integration with e-commerce**
- ③ **Product Procurement: Extension of Phase 1**
- ④ **Overall System Considerations for the Supply Chain**
- ⑤ **Cash Handling in Retail**

■ Future Initiatives

Through our activities thus far, companies interested in exploring social implementation have emerged. Moving forward, we aim to develop the subcommittee into a platform for deeper discussions on implementation and to broaden the scope of our exploration.

Revised for a more concise style.

■ Participating Companies

- ABeam Consulting Ltd.
- AEON Financial Service Co., Ltd.
- Internet Initiative Japan Inc.
- INTEC Inc.
- au Financial Holdings Corporation
- NTT Group

- Kao Group Customer Marketing Co.,Ltd
- CYBERLINKS CO.,LTD.
- Seven Bank, Ltd. (Seven & i Holdings Co., Ltd.)
- SOHGO SECURITY SERVICES CO.,LTD.(ALSOK)
- TSURUHA HOLDINGS INC.
- TIS Inc.
- Hitachi, Ltd.
- Lawson Bank, Inc.
- Laurel Bank Machines Co., Ltd.

*Society 5.0 is the next-generation social model proposed in Japan that aims to create new value and solve social issues by integrating digital technologies with physical space. Specifically, it features the use of advanced technologies such as the Internet of Things (IoT), Artificial Intelligence (AI), big data, and robotics to achieve economic growth and resolve social challenges. It evolved from the traditional information society (Society 4.0) and aims to realize a human-centered society.

Part 3

5. Wallet Security Subcommittee

Security Issues and Countermeasures for Distributed Ledger Systems

-Toward Building a Safe Business Utilizing the DCJPY Network-

The Wallet Security Subcommittee has been working toward establishing fundamental security requirements centered on the management of private keys (signature keys) and the software and users that utilize these keys, enabling companies and organizations participating in this forum to safely and securely handle digital currency platforms. In January 2024, we issued the "Security Review Report [Distributed Ledger]" summarizing the results of Phase 2 of this subcommittee's activities and shared it within the Digital Currency Forum.

This report compiles the results of examining security issues and mitigation measures for systems built and operated by businesses in the Business Zone of the DCJPY network, focusing on connecting distributed ledgers managed by external vendors. Examples of distributed ledgers managed by external vendors include those for managing electricity trading and digital assets such as environmental value tokens and NFTs of digital art. Some of these distributed ledgers were operational before the establishment of the DCJPY network.

Distributed ledgers managed by external vendors may be managed and operated independently of the DCJPY network, potentially leading to security issues in the external distributed ledgers that affect business zone systems.

Additionally, distributed ledgers encompass various functions and technical elements that are complexly interrelated, resulting in a variety of security threats

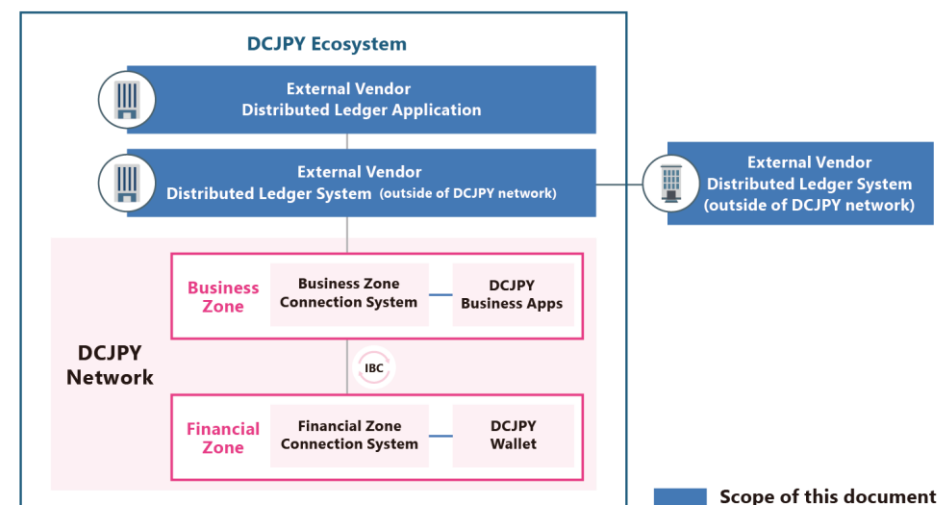


Figure 10: Subjects of Consideration in the Security Review Report [Distributed Ledger]

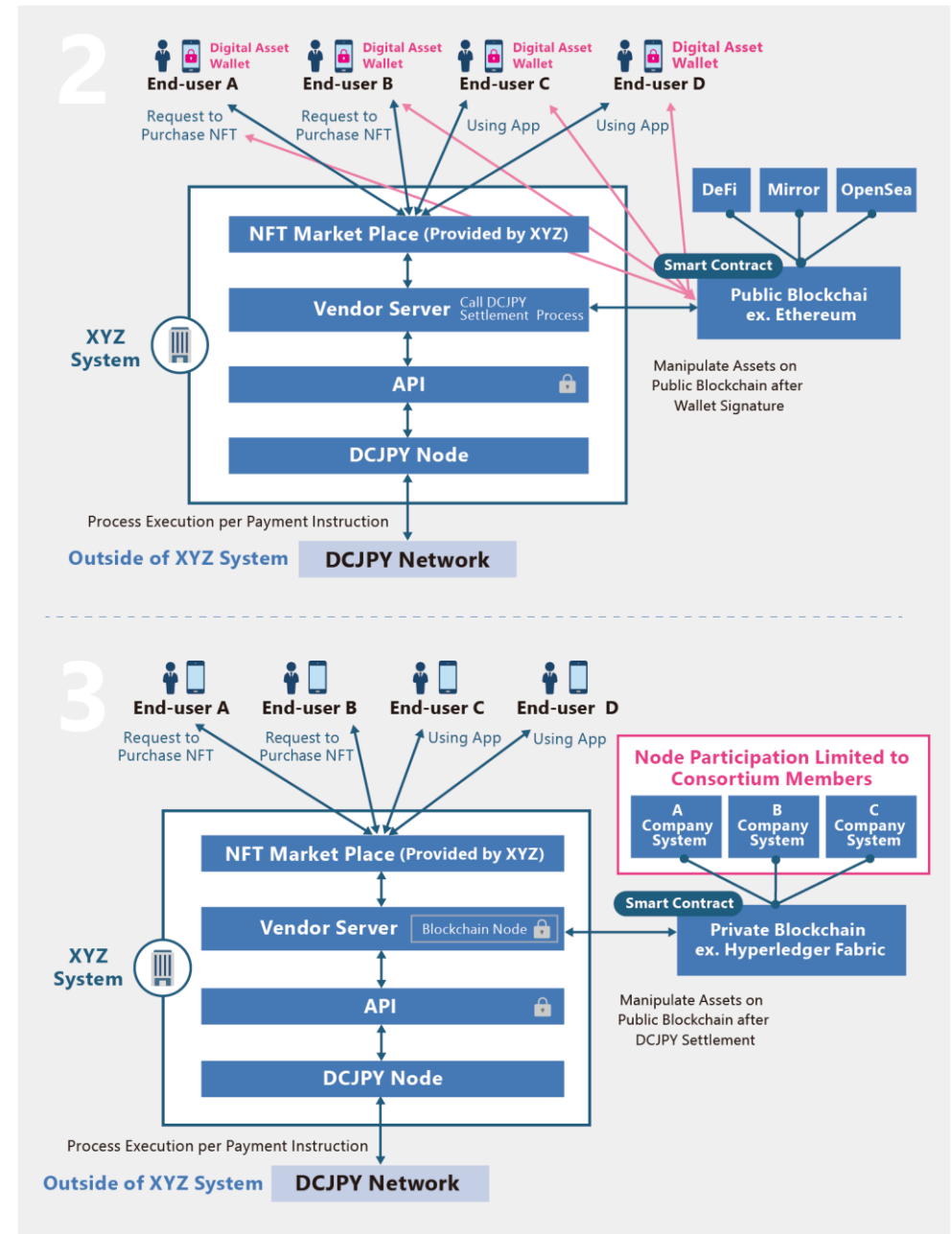
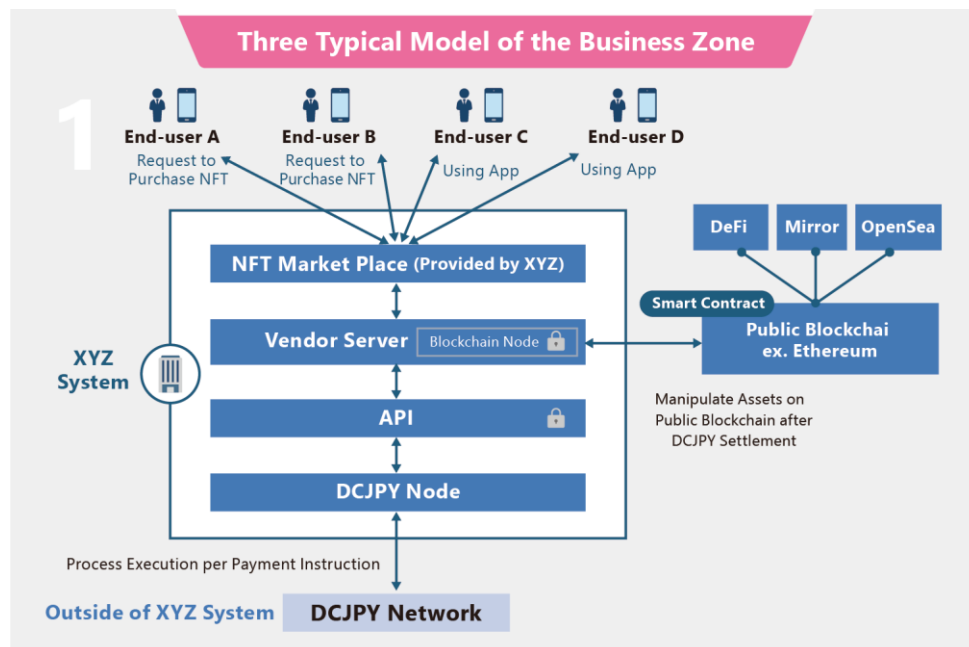
that are challenging to understand. Therefore, this report analyzes the elements involved with distributed ledgers, contemplating the threats inherent in these elements and risk mitigation strategies for those threats.

This report categorizes distributed ledgers into permissionless/permissioned and public/private forms based on ISO 23257:2022 "Blockchain and Distributed Ledger Technologies — Reference Architecture." This classification highlights the differences in the characteristics of distributed ledgers and the security issues that must be considered.

Based on this classification, this report presents three representative models of business zones connected to public permissionless and privately permissioned distributed ledgers, discussing common security issues and model-specific security challenges.

Common security issues include security challenges related to the distributed ledger platform, the distributed ledger system, and systems of the Business Zone connected to the distributed ledger system.

A distributed ledger platform refers to software that provides the fundamental functions of distributed ledgers, such as Ethereum and Hyperledger Fabric. A distributed ledger platform incorporates multiple functions and elements, including cryptographic technologies and message consensus mechanisms. The security of a distributed ledger, such as its immutability, is maintained when these functions are appropriately combined. If the specific functions or elements of the distributed ledger platform do not operate correctly, the expected security of the distributed ledger may not be maintained. This report examines the representative functions and elements provided by distributed ledger platforms and the potential



security challenges that could arise from their malfunctions.

A distributed ledger system refers to the actual operational network of distributed ledgers built by nodes running the software of the distributed ledger platform. The security challenges of the distributed ledger system include attacks on the system, issues with smart contracts deployed on the system, and challenges related to connections with external systems such as DLT oracles.

Security challenges concerning the systems of the Business Zone connected to the distributed ledger system include issues such as the execution environment of distributed ledger nodes, key management of distributed ledgers, and connections with applications related to distributed ledgers.

Issues related to the distributed ledger platform and system are considered difficult for Business Zone operators to control directly, making risk mitigation strategies a primary focus. The challenges faced by the systems of the Business Zone will be addressed by operators, including issues unique to distributed ledgers such as key management, in addition to general information security management and cybersecurity measures.

This report examines the security considerations regarding the external distributed ledgers of the DCJPY network. To effectively address security challenges in distributed ledgers, individual operators face difficulties owing to factors such as the complexity of specifications, challenges in assessment, and the rapid advancement of technology. To promote the safer use of distributed ledger systems, it is crucial to collaborate with this forum and other industry organizations involved with distributed ledgers, developer communities, user

communities, academia, security professionals, and standardization bodies. Collaboration should focus on sharing cases related to safety and actual risk responses involving distributed ledgers, accumulating deeper insights, formulating guidelines, evaluating implementations, and creating lists of recommended implementations.

■ Participant companies

Lead Masashi Sato SECOM CO.,LTD.

- Internet Initiative Japan Inc.
- NTT DATA Japan Corporation
- Keychain GK
- SBI Security Solutions Co., Ltd.
- SECOM CO., LTD.
- Sony Payment Services Inc.
- SoftBank Corp.
- NEC Corporation
- Daiwa Institute of Research Ltd.
- Tokyo Kiraboshi Financial Group, Inc.
- TOPPAN Edge Inc.
- HashPort Inc.
- The Hiroshima Bank, Ltd.
- PwC Consulting LLC
- Future Architect, Inc.
- Resona Holdings, Inc.

Comment from an Expert

Research Professor, Virginia Tech
Research Professor, Georgetown University

Shin'ichiro Matsuo

To ensure the widespread adoption of cryptocurrencies and distributed ledgers, it is essential to ensure the security of the entire system by applying the protocol, even if the blockchain protocol itself is safe and robust. Furthermore, security needs to be examined on a use-case basis, requiring separate consideration of various applications that utilize the DCJPY. Owing to this necessity, the recently compiled Security Review Report encompasses not only the security of the distributed ledger platform itself but also that of the distributed ledger system and associated Business Zones, covering the security perspectives that operators should consider. The numerous incidents that have occurred in relation to blockchain can be attributed to the lack of common understanding among the involved operators regarding this overall picture and the decomposition of security issues. This study is expected to play a significant role in addressing these issues.

Part 3

6. DCJPY-based EC Payment Solutions in web 3.0 Study Group

Building a New Payment Platform for web 3.0 Business

This study group commenced its activities in June 2023 with the objective of determining whether a new payment method is necessary for transactions occurring in the web 3.0 realm, and to examine related challenges and solutions. Additionally, if it becomes clear that this new payment method has advantages over existing e-commerce payment methods, the study group will explore the implementation of both payment methods.

In the web 3.0 environment, unlike in web 2.0, it is believed that the connection between individual accounts and the value of the information itself will become stronger. Furthermore, it is possible that business models will emerge where "value rights" (rights related to the sale of goods and services, such as copyright and ownership) are linked to transactions. It is assumed that information itself may gain value in web 3.0 business, allowing for the storage and exchange of information.

■ Assumptions on Changes in Business within the web 3.0 Environment

- ① There will be an increase in direct transactions between individuals.
- ② "Value rights" (rights expressed in digital information) will be traded.
- ③ "Transaction tracing" will become possible.
- ④ Businesses that achieve "congruence between physical goods and rights expressed in digital information" will become widespread.*
- ⑤ Payment methods that can achieve "congruence between physical goods

and rights expressed in digital information" will be necessary.

From a functional perspective, while payments are currently used for the sale of goods and services in the web 2.0 world, functions such as the transfer of value rights, identity verification, and ensuring safety will also be required for payments. This suggests that the strengths of the DCJPY digital currency issued by banks can be utilized to achieve these functionalities.

Strengths of the Digital Currency DCJPY Issued by Banks

- Account verification is possible.
- Users can utilize their existing bank deposit accounts.
- Tracking of transactions and rights is possible.
- Smart contracts enable Delivery Versus Payment (DVP) and other features.

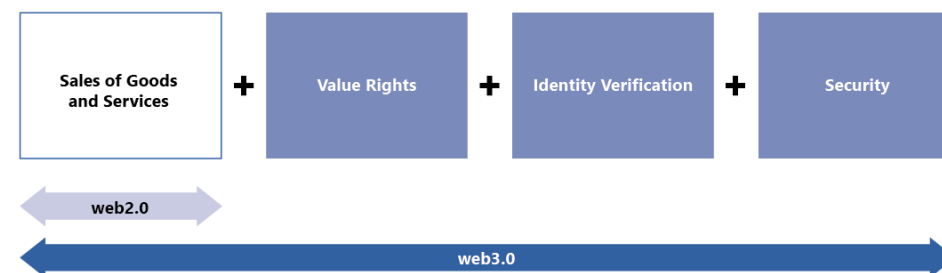
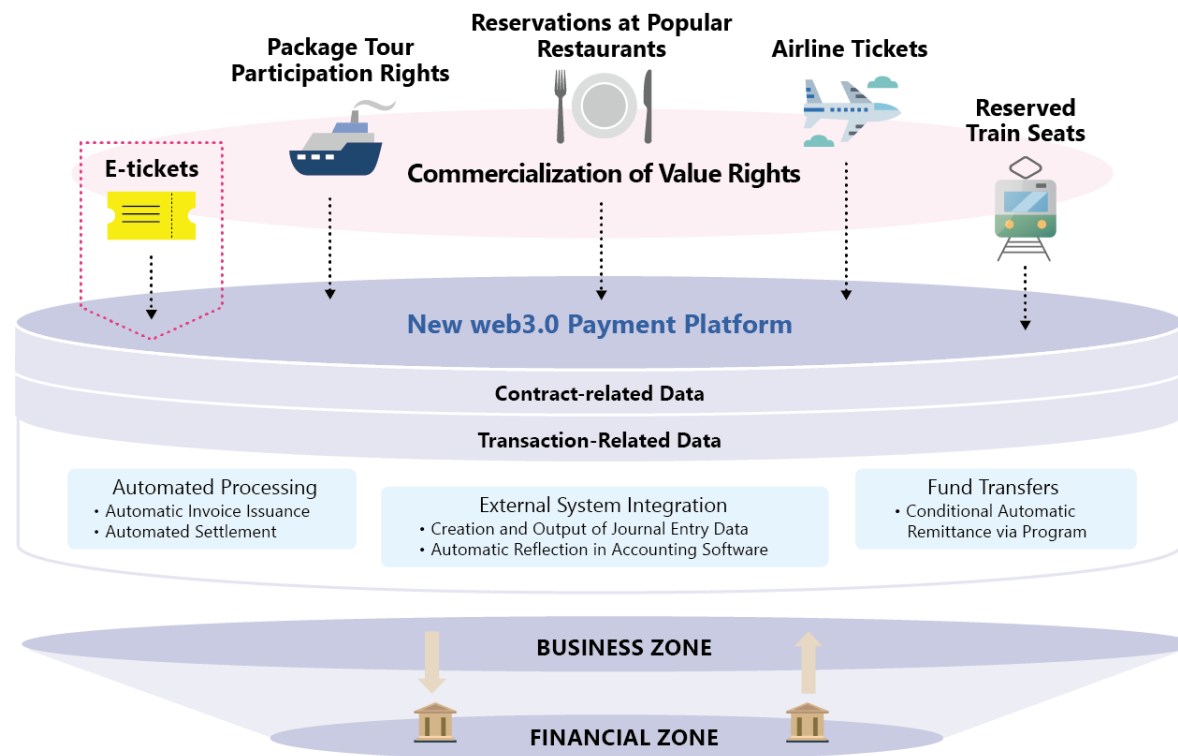


Figure 14: Hypothetical Business Transformation in web 3.0

Based on these assumptions, this study group conceptualized a design for a platform that manages the circulation of value rights linked to the sale of goods and services, using the DCJPY as a model case. This platform will manage the circulation of value rights related to the sale of goods and services, with automated processing functions for accumulating contract- and transaction-related data, integrating with external systems, and transferring funds. This is expected to improve the operational efficiency and enable the provision of value-added services using sales history data.

Future Initiatives

Utilizing this platform, for example, in the buying and selling of electronic tickets, will not only address societal issues such as high-priced resales and the circulation of counterfeit tickets but also activate the market and acquire new customer segments. Additionally, in the sale of other goods and services, businesses can be developed generically using business models that link value rights and identity verification.



➡ A business model where the sale of goods and services, such as e-tickets, is linked with the distribution of value rights and identity verification.

➡ A platform for managing the distribution of value rights related to the sale of goods and services. It maintains a record of contracts and transactions, enabling the use of information on past fraudulent activities as valuable data for the platform.

Figure 15: Grand Design of the New E-commerce Payment Solutions with DCJPY in web 3.0 Study Group

Currently, the study group is conducting progressive discussions with participating companies by organizing the challenges, benefits, and values that the DCJPY provides regarding electronic ticket transactions as a model case for value rights transactions. The goal is to determine whether the service can be released by the fiscal year 2026 as a milestone for advancing activities. As the first service of the DCJPY was launched in August 2024, the group aimed to clarify its core functions, assess its profitability, and explore potential applications.

■ Participating Companies

- Sony Payment Services Inc.
- YAMATO SYSTEM DEVELOPMENT CO., LTD.
- JAPAN POST BANK Co.,Ltd.

*: Identity verification (matching the account ID with the individual), ensuring that the correct items are attributed to the rightful owner, guaranteeing that services are reliably provided to the legitimate rights holder, etc.

Comment from an Expert

Certified Public Accountant, Advisor of Digital Currency Forum

Chikako Suzuki

In web 3.0, where an increase in P2P transactions is anticipated, the ability to transfer value and rights to the blockchain, along with settlements using the DCJPY, is expected to create significant value for participating individuals, companies, event organizers, and performers. This includes features such as proof of authenticity, immediacy of settlements and value/right transfers, establishment of contract conditions via smart contracts, and ensuring legitimate secondary distribution channels. Based on the results of the Proof of Concept (PoC), we anticipate expanding efforts related to governance and control through various programs that can enhance practical versatility as well as third-party evaluations of these operations, owing to the nature of blockchain enabling direct transactions between performers and individuals.

Players	Current Issues	Benefits for Each Stakeholder
Audience (Consumers)	<ul style="list-style-type: none">• Resale of tickets only at the purchase site• Difficulty in verifying ticket authenticity	<ul style="list-style-type: none">• Increased flexibility for ticket resale• Easier purchase experience• Simplified authenticity verification• Streamlined identity verification
Organizer	<ul style="list-style-type: none">• Only face-value sales are permitted to prevent unauthorized resales	<ul style="list-style-type: none">• Enhanced customer satisfaction through improved ticket liquidity• Protection of brand image• Increased revenue through new sales methods
Promoter	<ul style="list-style-type: none">• Limited freedom for resale on third-party sites• Face-value pricing is currently the only solution for preventing unauthorized resale	<ul style="list-style-type: none">• Efficiency in settlement processes• Revenue growth through new sales methods
Venue	<ul style="list-style-type: none">• Time-consuming identity verification process	<ul style="list-style-type: none">• Reduced identity verification costs
Artist	<ul style="list-style-type: none">• Low liquidity of ticket sales make it difficult to expand the fan base	<ul style="list-style-type: none">• Access to new revenue opportunities
Ticket Sales (Ticket Agency)	<ul style="list-style-type: none">• Limited transaction flexibility make improving customer satisfaction difficult	<ul style="list-style-type: none">• Revenue growth (from acquiring sales opportunities, leveraging unique sales advantages)• Expansion of ticket offerings

Proposed Value of DCJPY
<ul style="list-style-type: none">● Elimination of Counterparty Credit Risk through DVP Increased Transaction Flexibility● Ability to Limit Payment Amounts Management of Sale and Purchase Amounts, Allowing the Organizer to Set Rules in Line with Their Intentions● Ability to Restrict Transfer Destinations Transfer of Destination Management● Transactions with Bank-KYC Accounts Enables Safe and Highly Reliable Transactions● Conditional Automated Transfers via Programming Efficiency Achieved through Automation● Traceability of Transaction History Easy Authentication of Ticket Authenticity

Figure 16: Current Considerations in the Electronic Ticketing Industry for Events

Part 3

7. Life Insurance Use Cases Study Group

■ Background

The insurance industry is currently facing many environmental changes, including population decline, diversification of customer needs, and advancements in digital technologies. In particular, the impact of advancing digital technologies on business models and service delivery within the insurance industry demands special attention and requires the industry to respond flexibly to these changes. Furthermore, while the introduction of new digital technologies can streamline operations and provide new customer experiences, it also necessitates addressing new risks, such as cybersecurity and data management.

■ Goal

Given this background, this study group was established to explore whether blockchain technology and the DCJPY can address and streamline common issues and "noncompetitive areas" in the insurance industry. The aim is to apply the know-how, time, and resources gained through this process to competitive areas, thereby expanding services and improving profitability.

Moreover, by exploring business opportunities using the DCJPY and blockchain, we aim to foster digital talent within this study group to deepen their expertise in these areas.

■ Expected Outcomes Through Discussions

While life insurance companies are advancing efficiency by consolidating and sharing information across certain operations, this study aims to identify

specific areas in which the DCJPY could be effective. By examining the application of blockchain technology and the DCJPY, we anticipate achieving the following three objectives, along with insights for improving profitability:

- **Identifying common potential issues within the insurance industry**
- **Specifying non-competitive areas for addressing these issues and developing solutions**
- **Developing digital talent knowledgeable in blockchain and digital currency**

■ Summary of Activities FY2023

To guide our discussions, we first shared the latest trends in central bank digital currency (CBDC), both domestically and internationally, as well as prior examples of blockchain use in the life insurance industry. We found high compatibility between automating business flows and digital currency use, suggesting that blockchain-enabled digital currencies could support the fulfillment of payments and services in line with the defined terms of life insurance contracts. Participating companies have reached a common understanding of the need to solidify industry-specific use cases and requirements for digital currency and to work in cooperation with relevant partners (e.g., hospitals and banks).

Based on these discussions, we selected three themes for consideration: Group Credit Life Insurance, Group Insurance, and Group Pension Insurance. After gathering feedback on each insurance type's characteristics and potential applications of DCJPY, "group credit life insurance" was chosen as the primary focus.

We then narrowed our focus further to consider whether the insurance payout process could be automated through the DCJPY by following these steps:

Study Process

- **Organizing the current workflow (As-Is)**
- **Identifying key points where fund transfers occur**
- **Examining the benefits to policyholders from DCJPY application, among others**

Going forward, we will continue to identify the necessary components for automating the insurance payout process. This includes examining the tokenization of the required information assets, implementing smart contracts, establishing verification methods for payment accounts, and working towards the realization of automated insurance payouts through the DCJPY.

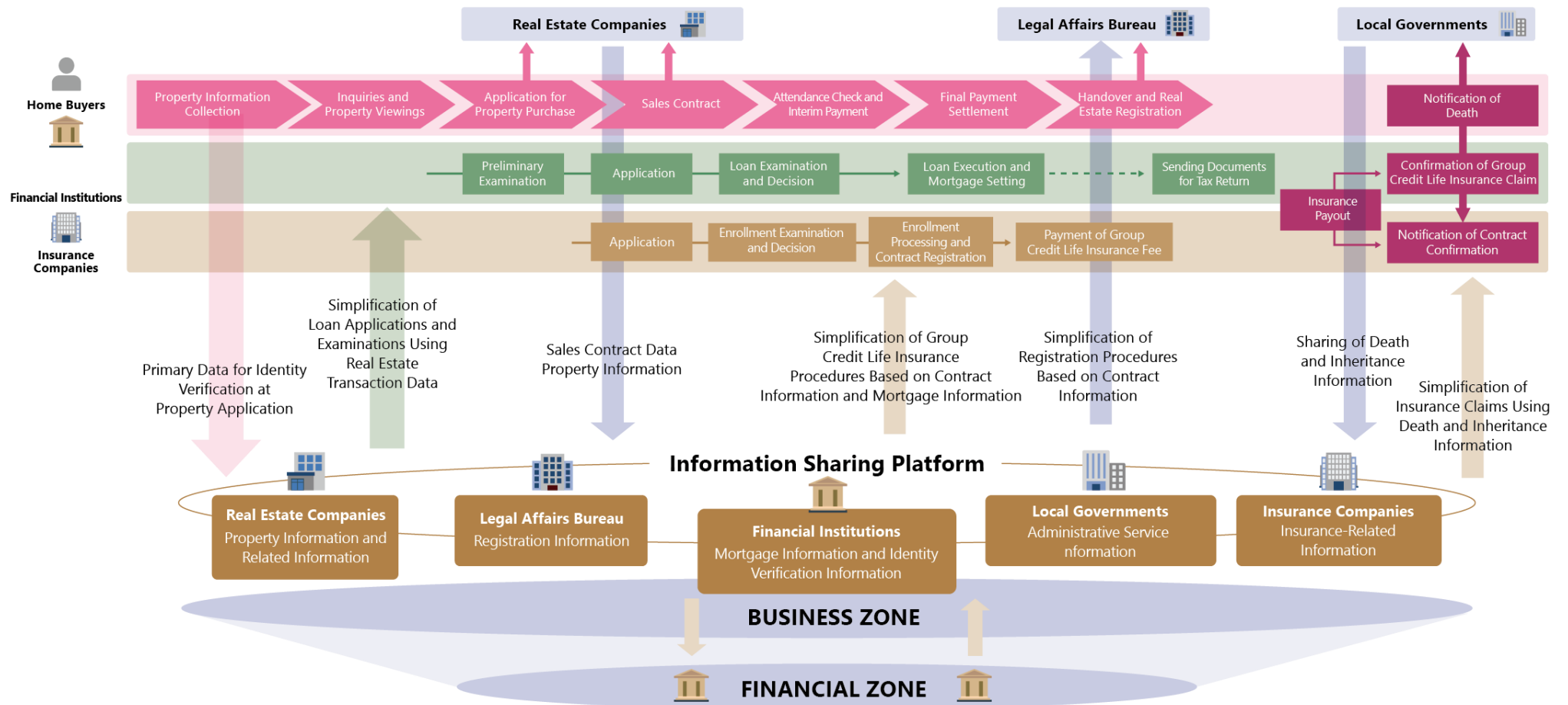
■ Future Initiatives

Moving forward, we will continue to study the feasibility of automating insurance payouts for group credit life insurance using the DCJPY. This study is expected to reveal the potential challenges and assess the feasibility of implementing digital currency and smart contracts in operations, allowing us to analyze the impacts and applications for our business.

Concurrently, we plan to investigate and assess the necessary steps for implementing digital currency and smart contracts across the life insurance industry, as well as involving other relevant stakeholders. Through these activities, we aim to create a society in which life insurance holds great value and offers everyone a more secure and confident way of living.

■ Participating Companies (in alphabetical order)

- SUMITOMO CORPORATION
- The Dai-ichi Life Insurance Company, Limited
- DAIDO LIFE INSURANCE COMPANY
- Nippon Life Insurance Company
- NEC Corporation
- Meiji Yasuda Life Insurance Company



Currently, when purchasing a home, various stakeholders manage contract details individually and proceed with their respective processes while sharing information as needed, resulting in repeated verification tasks and redundant procedures.

By building a foundation on the DCJPY network, it becomes possible to implement finance related to transactions. By incorporating programming, transactions and settlements can be aligned, achieving automation of settlements. There is also potential for expansion into finance service provision and registration-related services.

Information Sharing System Based on Blockchain
→Records contract details, transaction history, contractor information, real estate information, etc., and allows for collaborative use to the extent possible.

Figure 17: Overview of Group Credit Life Insurance

Part 4 Towards DX Innovation in Business-to-Business Transactions

Launch of the Invoice Chain Subcommittee

In Japan, corporate B2B settlements have traditionally relied on digital services for invoicing, payment, reconciliation, and accounting, focusing on optimizing internal operations for both payor and payee companies. Standards, such as industry-specific EDI *¹ and PEPPOL *², have improved the efficiency of information exchange between companies. However, several challenges remain, including the high cost of system upgrades to meet these standards, waste of human resources

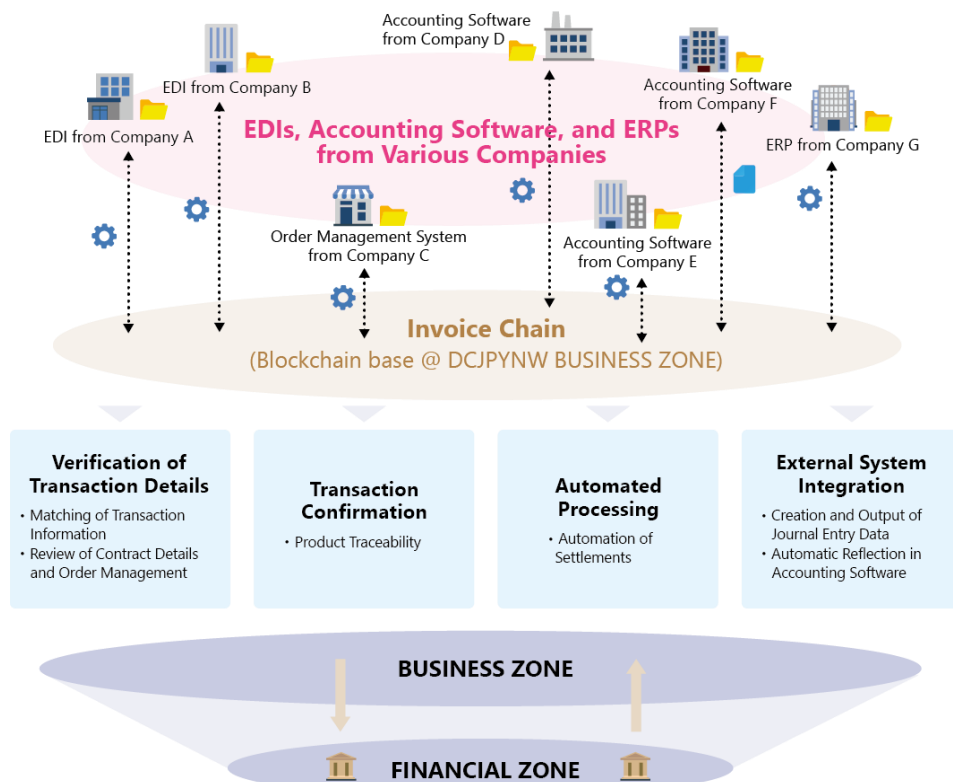


Figure 18 : The "Invoice Chain" that the Subcommittee Aims to Realize

on tasks manageable by programs, and delays in digital connectivity for accounting entries and payment information across different communication standards. To address these issues and collaboratively design solutions for B2B settlements, the Invoice Chain Subcommittee was launched in May 2024.

Purpose of the Invoice Chain Subcommittee

The subcommittee aims to create a framework that leverages existing systems to solve various B2B transaction issues and support the efficient development of B2B settlements in Japan. To achieve this, we have outlined the two main objectives, presented in our grand design (Figure 18):

- To establish an "Invoice Chain" as a shared network for transaction and payment data ledgers by integrating it with the DCJPY network.
- To enable interoperability and DCJPY settlements through the "Invoice Chain," even when different EDI or accounting software is used by partner companies.

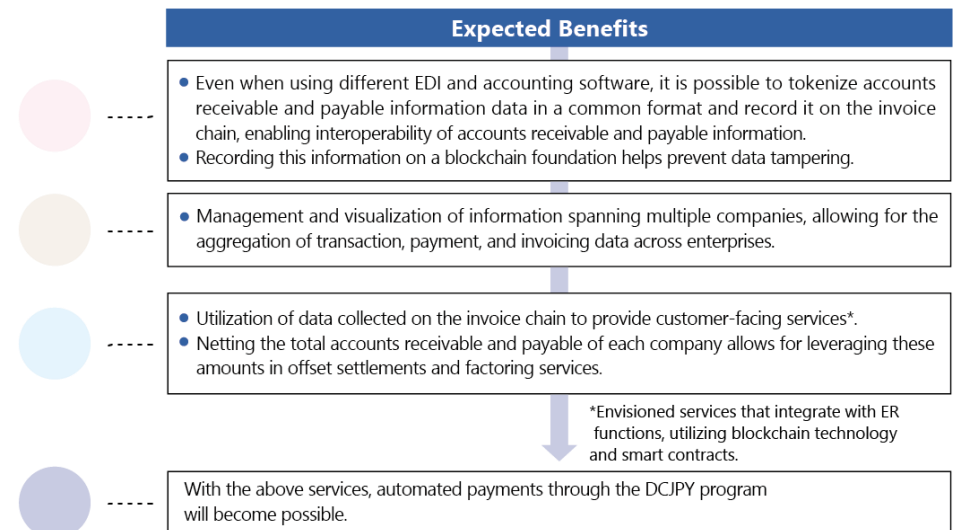


Figure 19: [Reference] Image of Achievable Benefits

■ A Paradigm Shift in Corporate Transactions through the “Invoice Chain”

With the implementation of the “Invoice Chain,” company departments will be able to significantly reduce middle- and back-office tasks while continuing to use their current UI and systems. This will streamline processes, reduce manual and duplicate work, and enhance the overall efficiency. Furthermore, increased transparency and real-time data sharing will enable faster and more accurate decision making. This transformation is expected to drive the DX innovation in commercial transactions and enhance social competitiveness. The Invoice Chain has the potential to evolve business models rather than just optimize workflow.

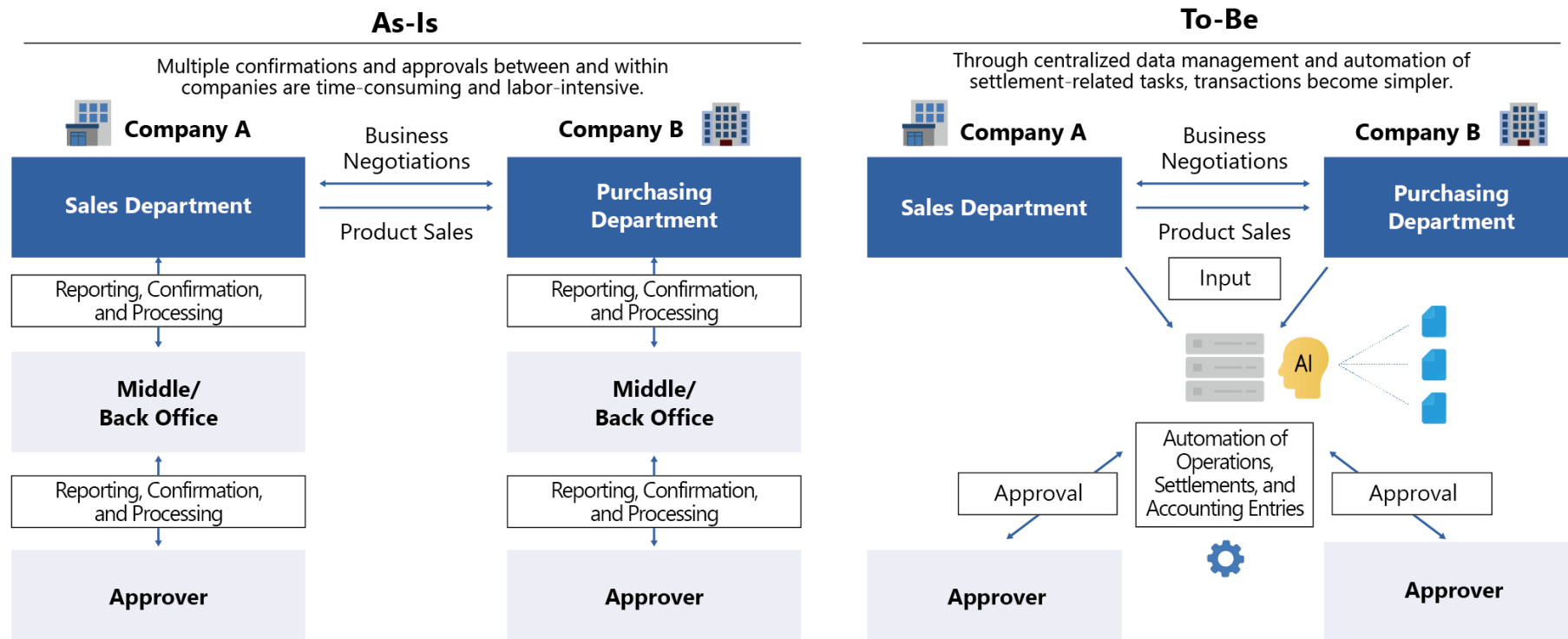


Figure 20: Unification of Commercial Transaction Data and Expected Paradigm Shift in Each Business Operation

■ Future Developments

The Invoice Chain Subcommittee was established based on industry feedback and the results of PoC projects previously conducted by the Digital Currency Forum. Although many issues must be resolved for successful implementation, steady progress has been made based on well-established achievements. The following initiatives illustrate how the Invoice Chain can support a prosperous society:

• Addressing a Declining Population

▶ By substituting program-based processing for tasks traditionally handled by human resources, the Invoice Chain offers solutions to labor shortages in a declining population. Furthermore, it has the potential to solve longstanding challenges in receivables/payables reconciliation and reduce operational burdens.

• Reducing System Update Costs and Timelines

▶ Much of the system upgrade work previously required for each company to adapt to environmental changes can be minimized by using the “Invoice Chain,” which supports adaptations to various changes in the environment.

• Supporting Digitalization for SMEs

▶ Simply connecting data to the Invoice Chain enables comprehensive digitalization of transaction operations and payments, offering substantial benefits to SMEs that have found it difficult to reap the benefits of digital transformation.

• Enhancing Financial Services

▶ When trade flows and cash flows are integrated through the Invoice Chain, traditional financing models can evolve to include automated financing schemes and supply chain finance that provide funds as needed and at the right time. This reduces the financial burden on companies and allows them to focus on their core businesses.

• Streamlining Auditing

▶ Tokenization of settlement data and automation through smart contracts facilitate the verification of accounts receivable existence and valuation accuracy, among other rights and obligations, potentially achieving significant auditing efficiency gains.

■ Participating Companies

< Co-Lead Company >

- OBIC BUSINESS CONSULTANTS CO.,LTD.
- Hitachi, Ltd.
- MIROKU JYOHU SERVICE CO., LTD.

< Participating Companies >

- IJ Engineering Inc.
- Internet Initiative Japan Inc.
- INTEC Inc.
- Infomart Corporation
- SBI Ripple Asia Co., Ltd.
- NTT DATA Japan Corporation
- Kao Group Customer Marketing Co.,Ltd
- CYBERLINKS CO.,LTD.
- TSUNAGU-IT Consortium
- TSURUHA HOLDINGS INC.
- Fast Accounting Co., Ltd.
- Planet, INC
- Le-Techs Inc.

* 1: EDI (Electronic Data Interchange) refers to a system for the electronic exchange of commercial transaction information between companies.

* 2: PEPPOL (Pan-European Public Procurement On-Line) is a standardized network that enables companies and public institutions to exchange electronic invoices and orders internationally in a simple and secure manner.

■ Message from the Co-Lead Companies

The Invoice Chain Subcommittee is promoted under a co-lead structure with broad participation from various industries, working towards establishing an industry-wide infrastructure for non-competitive areas.

Message from the CEO of a Co-Lead Company Toward Realization



**President & CEO at MIROKU JYOHO
SERVICE CO., LTD. (MJS)**
Hiroki Koreeda

MJS provides ERP solutions focused on accounting and taxation for businesses and is also highly invested in DX consulting services to support operational improvements and productivity enhancement. With the recent introduction of the Electronic Books Maintenance Act and the "Invoice System," the Digital Invoice Promotion Council, known as "EIPA," has established a standard specification for digital invoices in Japan, aligning with the international standard "Peppol." We have joined the activities of the Digital Currency Forum and the Invoice Chain Subcommittee because we believe that the concept of data linkage between "various business processes" and "accounting and settlement" using DCJPY technology aligns well with our mission to enhance business operations and productivity.

Message from the Representative of the Co-Lead Company Towards Realization



**General Manager of Product
Development Department ICT-
Center at OBIC BUSINESS
CONSULTANTS CO., LTD.**
Kazumaro Hino

As a provider of cloud-based business software for small and medium-sized enterprises, our company is participating in the Invoice Chain Subcommittee to promote the digitization of business transactions. The Invoice Chain system enables efficient and secure transactions between companies by integrating the entire data flow from ordering to settlement and accounting using the digital currency, DCJPY. Compared to traditional EDI or paper-based transactions, this system offers advantages such as cost reduction, improved cash flow, and simplified tax management. Additionally, the tokenization of transaction data paves the way for new value creation and circulation.



**Director of Blockchain Web3
Solution Department at Hitachi,
LTD.**
Kei Fukuta

The digitization of inter-company transactions has long been a challenge tackled by various industry associations, but the primary obstacle to improving operational efficiency lies in the discrepancies between commercial transactions and financial settlements—namely, between "distribution and logistics" and "fund flows." In this recent initiative of the Invoice Chain Subcommittee, the use of the DCJPY network enables a consolidated approach to handling financial settlements and commercial transaction data, thereby minimizing inconsistencies. Furthermore, by applying blockchain technology to settlements and intercompany data exchanges, we believe that intercompany payments and data synchronization can be conducted in a secure and reliable manner. Hitachi will support these implementations by providing system-level assistance centered on blockchain.

Part 5 Column

Digital Currencies and Credit Creation

Hiromi Yamaoka (Chair, Digital Currency Forum)

One of the key issues on digital currency is how to maintain banks' credit creation function, which is critical in monetary and financial system.

Indeed, banks play a crucial role in financial systems. One of their primary functions is financial intermediation. Banks collect deposits from individuals and businesses, and allocate the fund raised through deposits to the projects expected to yield higher returns with lower risks. Such function of banks facilitates efficient resource allocation in the economy through market mechanisms.

Another important role of banks is to provide sufficient "commercial bank money" as payment and settlement instruments that support smooth economic activities. Through their credit creation function enabled by the fractional reserve system, banks can create deposits (deposit currency) whose amount is multiple times as much as that of the base money (central bank currency). In the statistics of monetary aggregates, M1 to M3, which consist mainly of bank deposits, are several times greater than the base money (M0). In the United States, the base money at the end of 2023 was \$5.8 trillion, while M2 had reached \$20.9 trillion.

Banks credit creation enables both the functions of market-based financial intermediation and ample provision of payment and settlement instruments to the economy. If we were to rely entirely on payment and settlement

instruments without any credit creation, such as those backed up fully by high-quality liquid assets (HQLAs) like government bonds or central bank reserves to satisfy all the payment and settlement needs, those instruments would end up blocking a massive amount of HQLAs. Sequestering these critical assets, which are highly needed for regulatory compliance, collateral and fund management, solely for payments and settlements would create various deadlocks in the economy.

In recent years, many scholars and researchers in international organizations and central banks have highlighted the importance of banks' credit creation function in the monetary and financial system. This issue shares many commonalities with the debate on "narrow banking" proposal in the 20th century. The recent global interest in "tokenized deposits" is based largely on the idea of maintaining banks' credit creation function while utilizing blockchain and DLT.

The global studies and initiatives on digital currency infrastructure has led to a renewed awareness of the importance of banks' roles and functions in the monetary and financial system. How to maintain and utilize these functions is a critical issue in designing an ideal financial infrastructure in the coming future.

*1: Note that, in Japan, the "quantitative and qualitative monetary easing" policy had been introduced since 2013, resulting in a gigantic expansion of the monetary base. Nevertheless, as of the end of 2023, the monetary base stood at 673 trillion yen, while M2 reached 1,241 trillion yen, which was almost twice as much as monetary base.

*2: Numerous papers addressing this issue have been published in recent years, with one example being "The Future of Payments is Not Stablecoins," written by economists at the Federal Reserve Bank of New York in February 2022.

Part 6

Concluding Remarks

Thank you for reading Progress Report No.3. As mentioned in previous reports, I participated in this Digital Currency Forum with the vision of supporting a digital currency backed by blockchain that functions as a part of the socioeconomic infrastructure, enabling businesses to expand their digital operations on this network.

The DCJPY adopts a two-layer model chosen specifically to create a society in which diverse areas such as various commerce flows and small communities in digital spaces are seamlessly interconnected. This model aims for broad applicability beyond narrow fields.

As the DCJPY network expands, the digital economy will continue to grow. The first step in this journey was the launch of “DCJPY settlements for trading environmental value tokens” in August 2024. While this commercial service launch may be a small first step, we should continue advancing from here and work toward realizing a society where the DCJPY becomes a widely shared tool through our efforts at the Digital Currency Forum.

To achieve these goals, a Digital Currency Forum was established. As this report outlines, subcommittees consist of a diverse range of companies engaged in dynamic discussions. This unique strength is only possible within the Digital Currency Forum. Gathering people with shared goals and interests brings forth new ideas and discoveries, leading to discussions about possibilities and inspiring innovation.

Through numerous proof-of-concept trials and discussions in the subcommittees, the utility of the DCJPY has been steadily demonstrated, and we are now poised for its practical application phase. Moving forward, we need to focus on how to build communities that will utilize the DCJPY and those who will connect with whom, making these discussions more concrete. As we look toward further development, I sincerely hope we can work together to propel this initiative forward, helping build a new digital economy alongside the digital evolution of the existing economic ecosystem.

Toshihide Endo
Senior Advisor
Digital Currency Forum
(Former Commissioner of Financial Services Agency)



Part 7

The Digital Currency Forum Members

Chairperson **Hiromi Yamaoka, Director, Future Corporation** (Former Head of the Payment and Settlement Systems Department, Bank of Japan)

■ Participating from the Digital Currency Forum

- Aioi Nissay Dowa Insurance Co., Ltd.
- Aizuwakamatsu City
- Accenture Japan Ltd.
- Asukoe Partners, Inc.
- ABeam Consulting Ltd.
- ARATA CORPORATION
- AEON Co., Ltd.,
- AEON Financial Service Co., Ltd.
- Internet Initiative Japan Inc.
- Industry One, Inc.
- INTEC Inc.
- Intelligent Wave Inc.
- Infomart Corporation
- ANA Group (ACD Inc.)
- SBI Holdings, Inc.
- SBI Ripple Asia Co., Ltd.
- ENERES Co., Ltd.
- NTT Group
- Future Innovation Group, Inc.
- au Kabucom Securities Co., Ltd.
- au Jibun Bank Corporation
- au Financial Holdings Corporation
- Osaka Digital Exchange Co., Ltd.
- OBIC BUSINESS CONSULTANTS CO.,LTD.
- Kao Group Customer Marketing Co.,Ltd
- KATAOKA & KOBAYASHI LPC.
- The Kansai Electric Power Company, Incorporated
- Keychain GK
- Payments Japan Association, Incorporated
- Kyushu Financial Group,Inc.
- QTnet, Inc.
- KYOCERA Corporation
- Kumamoto Prefectural Government
- xID Inc.
- KDDI CORPORATION
- Kesenuma city
- CYBERLINKS CO.,LTD.
- SATUDORA HOLDINGS CO.,LTD.
- Shizuoka Financial Group, Inc.
- JCB Co., Ltd.
- JPX Market Innovation & Research, Inc.
- SIGMAXYZ Inc.
- Super City AiCT Consortium
- SUMITOMO CORPORATION
- SUMITOMO LIFE INSURANCE COMPANY
- Securitize Japan K.K.
- SECOM CO., LTD.
- SettleMint Japan G.K.
- Seven Bank, Ltd. (Seven & i Holdings Co., Ltd.)
- SOHGO SECURITY SERVICES CO.,LTD.(ALSOK)
- SocioFuture, Ltd.
- Sony Bank Incorporated
- Sony Payment Services Inc.
- SoftBank Corp.
- Sompo Holdings, Inc.
- DAIICHIKOSHO CO., LTD.
- The Dai-ichi Life Insurance Company, Limited
- DAIDO LIFE INSURANCE COMPANY
- Dai Nippon Printing Co., Ltd.
- Daiwa Securities Group Inc.

- Daiwa Institute of Research Ltd.
- Chubu Electric Power Co., Inc.
- TSUNAGU-IT Consortium
- TSURUHA HOLDINGS INC.
- TIS Inc.
- DENTSU INC.
- Tokio Marine & Nichido Fire Insurance Co., Ltd.
- Tokyo Kiraboshi Financial Group, Inc.
- Tokyo Financial Exchange Inc.
- TOKYO METROPOLITAN GOVERNMENT
- TOPPAN Edge Inc.
- TOPPAN Holdings Inc.
- THE NISHI-NIPPON CITY BANK, LTD.
- West Japan Railway Company
- NS Solutions Corporation
- The Mortgage Corporation of Japan, Limited
- Japan Securities Clearing Corporation
- Nippon Life Insurance Company
- NEC Corporation
- Nomura Research Institute, Ltd.
- Nomura Holdings, Inc.
- HashPort Inc.
- Panasonic Holdings Corporation
- Hamamatsu City
- Hankyu Hanshin Holdings, Inc.
- PwC Consulting LLC
- East Japan Railway Company
- Hitachi, Ltd.
- BIPROGY Inc.
- The Hiroshima Bank, Ltd.
- FastAccounting Co., Ltd.
- FamilyMart Co., Ltd.
- Fintertech Co. Ltd.
- BOOSTRY Co., Ltd.
- Future Architect, Inc.
- Planet, INC
- Payroll Inc.
- Mizuho Bank, Ltd.
- MITSUI KNOWLEDGE INDUSTRY CO., LTD.
- Mitsui Sumitomo Insurance Co., Ltd.
- Sumitomo Mitsui Banking Corporation
- Sumitomo Mitsui Trust Bank, Limited
- Mitsubishi Corporation
- MUFG Bank, Ltd.
- Mitsubishi UFJ NICOS Co., Ltd.
- Mitsubishi UFJ Research and Consulting Co., Ltd.
- MIRAI Inc.
- MIROKU JYOHO SERVICE CO., LTD.
- Meiji Yasuda Life Insurance Company
- Mori Hamada & Matsumoto
- YAMATO HOLDINGS CO., LTD.
- JAPAN POST BANK Co., Ltd.
- Rakuten Edy, Inc.
- Le-Techs Inc.
- Resona Holdings, Inc.
- Bank of the Ryukyus, Ltd
- Lawson, Inc.
- Lawson Bank, Inc.
- Laurel Bank Machines Co., Ltd.

Total 119 companies (Includes group affiliated companies, Aizuwakamatsu city and Kesennuma city local government sectors)

Observers

- Financial Services Agency, Japan
- Ministry of Internal Affairs and Communications, Japan
- Ministry of Finance, Japan
- Ministry of Economy, Trade and Industry, Japan
- Bank of Japan

Advisors

- Masakazu Masujima
Partner, Mori Hamada & Matsumoto
- Tetsuya Inoue
Chief Researcher, Nomura Research Institute, Ltd.
- Shunji Kobayakawa
Professor, School of Political Science and Economics Meiji University

- Kenji Saito
Professor, Graduate School of Business and Finance Waseda University
- Chikako Suzuki
Certified public accountant

Senior Advisor

Toshihide Endo
(Former Commissioner of Financial Services Agency)

Part 8 Closing Remarks

Message on the Publication of Progress Report No. 4

The Digital Currency Forum, established in 2020, comprises 119 companies, financial institutions, local governments, and experts. Under this pan-Japan initiative, we have been exploring the utility of the DCJPY in addressing the challenges faced by various industries, aiming to determine the type of digital transformation (DX) that can be achieved.

Thanks to the efforts of our participating members, we believe that the Digital Currency Forum's initiatives are steadily materializing, as evidenced by the launch of "DCJPY settlements for trading environmental value tokens" in August 2024, marking the first achievement of the DCJPY initiative.

This marks the fourth issue of the Progress Report. As we reflected on the earlier editions while preparing this fourth issue, we are struck by how the discussions initially began from scratch, focusing on "what the financial infrastructure of the future should look like." There is a strong sense of exploration in identifying use cases for the DCJPY across various fields.

However, as insights gained from ongoing discussions and proof-of-concept trials accumulated, more concrete discussions began to emerge, revealing the potential for practical business applications.

Examining the activities of the various subcommittees and study groups in Chapter 3, you will see that our discussions have evolved beyond simply improving operational efficiency and payment methods to include

- **Verification of use cases with an emphasis on the core elements of the DCJPY, such as Asset and Contract.**
- **Initiatives aimed at realizing the tokenization of information and automatic processing through smart contracts.**

Additionally, new initiatives like the establishment of the "Invoice Chain Subcommittee" have further broadened the scope of the Digital Currency Forum's activities.

Recently, we have increasingly felt the shifts in the environment surrounding the Digital Currency Forum. There has been an increase in discussions about central bank digital currencies (CBDC) both domestically and internationally, and interest in tokenized deposits has grown. We have many opportunities to share the latest information with participating members in the context of our activities. Driven by innovations in information technology, tokenized Deposits have gained attention in advanced countries. In Appendix 2 of this report, we feature an explanatory interview article by Chairman Yamaoka, which we encourage you to read.

The world is paying attention to "Tokenized deposits," which tokenized deposits—liabilities of private banks—using blockchain and distributed ledger technology. This aligns perfectly with what we have been striving to achieve since the inception of the Digital Currency Forum alongside our participating members. Such global trends are likely to provide significant support for the activities of our members and the implementation of the DCJPY. Moving forward, the Digital Currency Forum will continue to collaborate with our participating members to realize an advanced financial infrastructure utilizing the DCJPY and actively contribute to building a prosperous society. We look forward to presenting further achievements of these efforts in the next section.

Finally, we wish to convey our deepest appreciation to the members who contributed to the preparation of Report No. 4, the lead companies of the subcommittee, advisory board experts, and all participating members for their continuous commitment.

Secretariat of the Digital Currency Forum

Behind the Cover Design The cover design of this report reflects the cumulative efforts of participating members, showcasing how their activities are shaping the future.

Appendix① | Proof of Concept (PoC) Achievements

● March 2024 Regional Currency Subcommittee

Technical Verification of a Token-type Tourist Access Pass using DCJPY

<https://www.decurret-dcp.com/dcforum/nl-20240516.html>

Participating Companies: Panasonic Holdings Corporation, SocioFuture, Ltd., au Financial Holdings Corporation, TIS Inc.

on March 21, 2024. Specifically, we implemented a Tourist Access Pass

● May 2023 STC Subcommittee

Publication of Results of Verification of Order, Execution, and Settlement Operations for Security Token Transactions

<https://www.decurret-dcp.com/dcforum/nl-20230531stc.html>

Participating Companies: Nomura Holdings, Inc., Daiwa Securities Group Inc., BOOSTRY Co., Ltd..

● March 2023 Regional Currency Subcommittee

<https://www.decurret-dcp.com/news/nl-20230303-chiiki.html>

PoC Using Digital Currency in Aizuwakamatsu City

PoC 1: Using Digital Currency in the Health Business with Purchasing Data

PoC 2: Using Digital Currency for Business-to-Business Settlements in Food and Agriculture Matching Services

Mizuho Bank, Ltd. Aizu branch, Toho Bank Ltd., Aizu Shinkin Bank, Aizu Commerce and Industry Credit Cooperative, JAPAN POST BANK Co., Ltd.

● March 2023 Administrative Affairs Subcommittee

PoC using Digital Currency with the Tokyo Metropolitan Government

<https://www.decurret-dcp.com/news/nl-20230329-gyosei.html>

Participating Companies: TOPPAN Edge Inc., TIS Inc., Mizuho Bank, Ltd., Tokyo Metropolitan Government

● March 2023 Electric Power Transaction Subcommittee(Group A)

PoC for Digital Currency Settlement with Environmental Value Added on Buses Running on Public Roads

<https://www.decurret-dcp.com/news/nl-20230227-electric-power-a.html>

Participating Companies: THE KANSAI ELECTRIC POWER CO., INC., Internet Initiative Japan Inc., Chubu Electric Power Co.,Inc., Hankyu Hanshin Holdings, Inc., Lawson, Inc.

● February 2023 Electric Power Transaction Subcommittee (Group B)

PoC for Sustainability Linked Loans toward Carbon Neutrality with Digital Currency

<https://www.decurret-dcp.com/dcforum/nl-20230215-electric-power-b.html>

Participating Companies: ENERES Co.,Ltd., Tokyo Metropolitan Government, Sumitomo Mitsui Banking Corporation

● June 2022 Retail and Distribution Subcommittee

PoC using Digital Currency in the Distribution Supply Chain

<https://www.decurret-dcp.com/pressrelease/pr-20220531-retail-distribution-poc.html>

Participating companies: Seven Banks Ltd., INTEC Inc., Tsuruha Holdings Inc., and Hitachi Ltd..

● March 2022 Regional Currency Subcommittee, Administrative Affairs Subcommittee

PoC for "Coupon Benefits Using Digital Currency"

TIS Inc., Mitsubishi UFJ Research and Consulting Co., Ltd., TOPPAN Edge Inc.

<https://www.decurret-dcp.com/dcforum/dcf-20220323.html>

Appendix① | Proof of Concept (PoC) Achievements

● March 2022 Electric Power Transaction Subcommittee (Group A)

PoC in Commercial Services (Stores) for Digital Currency Used in Electricity Peer to Peer (P2P) Transactions

<https://www.decurret-dcp.com/news/dcf-20220330.html>

Participating Companies: THE KANSAI ELECTRIC POWER CO., INC., Chubu Electric Power Co.,Inc., Hankyu Hanshin Holdings, Inc., MUFG Bank, Ltd., Lawson, Inc.

● March 2022 Electric Power Transaction Subcommittee (Group B)

Cooperative Demonstration to Promote Decarbonization of SMEs (Desk-top Verification)

Participating Companies: ENERES Co.,Ltd., DAIDO LIFE INSURANCE COMPANY, Sumitomo Mitsui Banking Corporation

<https://www.decurret-dcp.com/pressrelease/pr-20220331-electric-power-b.html>

● January 2022 Settlement in Industrial Distribution Subcommittee

PoC of BtoB Trading Smart Contracts in Linkage with Digital Currency

Participating Companies: Mitsubishi Corporation, NIPPON TELEGRAPH AND TELEPHONE CORPORATION, Industry One, Inc.

<https://www.decurret-dcp.com/pressrelease/pr-20220427-industrial-distribution-poc.html>

Appendix② | Previous publications

■ Reports

● FY2021

Progress Report of the Digital Currency Forum No.1 :

https://www.decurret-dcp.com/assets/forum_20211124pr.pdf

Digital Currency DCJPY(tentative name) White Paper:

https://www.decurret-dcp.com/assets/forum_20211124wp.pdf

● FY2022

Regional Currency Subcommittee (Interim Report) "The Potential of Digital Local Currencies"

https://www.decurret-dcp.com/assets/chiiki_report202202.pdf

● FY2023

NFT Subcommittee Study Report- Exploring the Utility of DCJPY in NFT Transactions and Potential Implementation Method

https://www.decurret-dcp.com/assets/NFT_report202302.pdf

Progress Report of the Digital Currency Forum No.2 :

https://www.decurret-dcp.com/assets/forum_20230131pr.pdf

Progress Report of the Digital Currency Forum No.3 :

https://www.decurret-dcp.com/assets/forum_20230719pr.pdf

■ Other Related Reports

● FY2023

Digital Currency DCJPY White Paper2023

(DeCurret DCP Inc.)

<https://amicsign.com/index.html>

■ Subcommittee Dialogue

● FY2023 Wallet Security subcommittee

vol.1



vol.2



vol.1

<https://www.decurret-dcp.com/dc-forum/forum-dialogue202310-1.html>

vol.2

<https://www.decurret-dcp.com/dc-forum/forum-dialogue202310-2.html>

● FY2024 Administrative Affairs Subcommittee

vol.1



vol.2



vol.1

<https://www.decurret-dcp.com/dc-forum/forum-dialogue202401-1.html>

vol.2

<https://www.decurret-dcp.com/dc-forum/forum-dialogue202401-2.html>

■ Chairperson Mr Yamaoka Interview

● FY2024 TOKENIZED DEPOSITS AND the DCJPY

vol.1



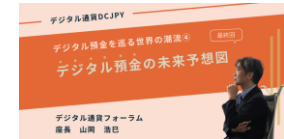
vol.2



vol.3



vol.4



vol.1 <https://www.decurret-dcp.com/dc-forum/forum-interview202404-1.html>

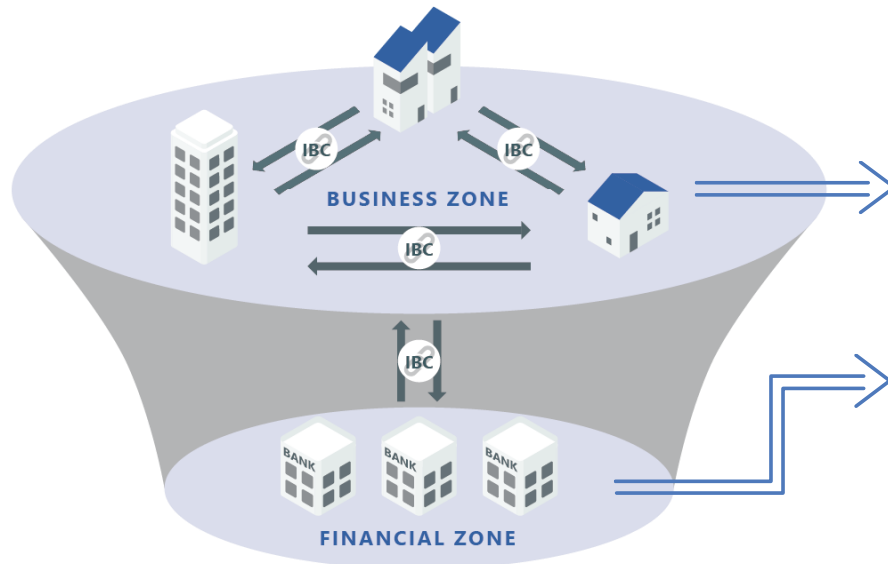
vol.2 <https://www.decurret-dcp.com/dc-forum/forum-interview202404-2.html>

vol.3 <https://www.decurret-dcp.com/dc-forum/forum-interview202404-3.html>

vol.4 <https://www.decurret-dcp.com/dc-forum/forum-interview202404-4.html>

Appendix③ | Glossary

Overall View of the DCJPY Network



● DCJPY

- One of the digital currencies.
- A form of programmable money that is linked to a fiat currency (Japanese yen) issued by private banks.

● DCJPY Network

A system that connects two blockchains with interoperability: the Financial Zone, which handles the money flow through DCJPY, and the Business Zone, which handles the commercial flow.

● Business Zone

The area managed and operated by businesses as business operators.

- Blockchain handles the commercial flow on the DCJPY platform.

● Financial Zone

The area managed and operated by banks.

- Blockchain handles the money flow through DCJPY on the DCJPY platform.

● AMIC

The Core Element of DCJPY Network

• Asset

Refers to digitized assets such as NFTs and security tokens. Assets created on the DCJPY Network are transparently and securely managed and transferred by backing their value with blockchain technology and associating them with an ID on the DCJPY Network.

• Money

A form of programmable money that is linked to a fiat currency (Japanese yen). The money itself can be programmed with uses and contract terms through the smart contract described below. This allows DCJPY to be used more flexibly and effectively.

• ID (Identity)

An ID on the DCJPY Network is an identifier of ownership of money and assets. It is issued by commercial banks based on KYC (Know Your Customer: identification procedures at financial institutions) and reveals the identity of the trading participant.

The ID allows for secure transactions while confirming who the other party is.

• Contract

A program that defines the process to use money and assets and the terms of the transaction. Also known as smart contracts, this provides a secure and transparent trading environment.

● Tokenized Deposits

Deposits, which are liabilities of private banks, are converted into "digital tokens" by applying blockchain and distributed ledger technology. This is also referred to as "Deposit Tokens."

● IBC

IBC (Inter-Blockchain Communication)
A mechanism for exchanging data and value between blockchains