



Jasmy

WHITEPAPER



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1. Introduction



“We aim to realize a Data Democracy by building a decentralized, democratic world where data is protected as inherently owned by each individual.”

When our basic needs such as clothing, food, shelter (Japanese: ishokuju) or transportation are connected via internet, this will dramatically affect our lives. We are an IoT platform company on a mission to provide the infrastructure which allows anybody to use data safely and securely. We are currently developing and providing the “Jasmy Platform” to achieve this.

In these times, the valuable data generated from our everyday life is possessed by a small number of companies. The Jasmy Platform aims to regain data sovereignty for each individual so that everyone can use their data safely and securely. To achieve this, we have combined Blockchain and IoT technology to provide the optimal platform solution for customers around the world, and across industries.

We are developing our business both from a manufacturer’s perspective as well as striving to become a market innovator. We will achieve this by building a new business foundation; combining IoT with a secure data management platform based on decentralized technology such as blockchain. In the new Information Age where people, machine and information are building new relationships, we believe that Jasmy can help Japan lead the world.

Jasmy Incorporated Representative Director
Kunitake Ando

2. Challenges in The New Digital Age

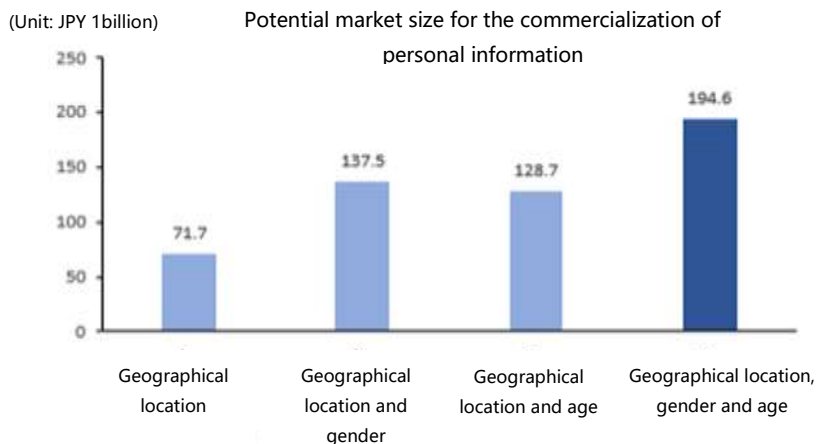
As of today, all people, things and services are connected to the internet, the impact of the Fourth Industrial Revolution will continue to deeply impact all areas of our life. Estimations predict there will be 41.6 billion internet-connected IoT devices, generating 79.4 Zettabyte (approx. 80 billion terabyte) of data per year by 2025. (International Data Corporation market forecast, 18 June 2019). The amount of data collected by IoT devices is increasing every day, and IoT sensor data plays an important role for businesses who provide high value-added services to customers and clients. On the other hand, many companies who hold their customers' personal data do not have proper data management systems to utilize their data, and system immaturities result in management problems, such as information leakage and compliance violations.

2.1 Challenges for the users

2.1.1 Personal information privacy security

Individual users regularly send personal data through smartphones or IoT devices to companies and receive services in return. However, by providing their personal data to companies blindly, the users may feel discomfort as if their behavior was under surveillance, have distrust on the purpose of data's usage, and anxiety about invasion of their privacy. At the same time, privacy issues arise as individuals are providing more private data to the companies than necessary. For this reason, laws that require users to require companies to disclose the purpose of their data or delete their personal information upon request are passed and enforced.

2.1.2 Scale of the economic value of personal information



According to the report Analysis on Economic Value of Personal Information, the value of personal information is maximized when region, gender and other factors from multiple dimensions are integrated, and the market value of personal information in Japanese is up to USD1.8billion. Therefore, once personal information is commercialized in the market, it will bring revenue to individual users rather than enterprises, and the revenue scale cannot be underestimated.

2.2 Challenges for the companies

In 2014, the personal records of approximately 35 million customers were leaked from Benesse Corporation as a subcontracted worker downloaded the data from the company system. Beside a direct fine of 300 million Japanese Yen (approx. \$2.8 million), the company had to record more than 26 billion Japanese Yen (approx. \$241 million) in losses. The social media giant Facebook was fined \$5 billion by the Federal Trade Commission (FTC) for improper treatment of user data in 2018. Such personal data breaches from companies centralized systems will never end.

According to the survey of IBM of 2018, with the popularization of IoT and AI, the corporate expenditures related to personal information leakage was USD 3.86 million averagely throughout the world, with a growth of 6.4% over the last year. This survey was conducted to 477 companies from major countries, and through a simple calculation, it's obtained that the expenditures related to personal information leakage were as high as USD1.84 billion in the world, and the annual corporate expenditures in personal information management were not included in such amount. It can be inferred that the overall market related to corporate personal information management has a scale of billions.

An enterprise's expenditures related to personal information disclosure are seemingly short-time lump-sum expenditures, in fact, their impacts on the enterprise's economic activities can last for as long as several years. The enterprises take various measures to enhance the network security, for example, increasing the number of servers, managing the passwords and IDs, and compulsively conducting system review, so they have to bear huge costs.

Global businesses in the common digital area must comply with the local data regulation in each country and build a suitable networked environment. The General Data Protection Regulation (EU) 2016/679 (GDPR) was implemented by the European Parliament and Council of the European Union in 2018. In reality, many companies have not yet built a clear response policy and plan regarding the handling of customer data in compliance with regulation.

2.3 The limit of data management

In the internet's current state, most services are commonly built as so-called centralized systems. The companies manage all the data on their own servers and provide various services to users. Such systems have significant advantages, such as a clear responsible party, and a fast processing of data as data storage and program execution are centralized on the company's servers, putting the users in high dependency to these centrally managed systems.

In the discussion on privacy and user information, words like Japan's "information banks" (Japanese: Joho Ginko), Personal Data Storage (PDS), and Personal Information Management System (PIMS) have become popular. These new mechanisms among the current centralized network aim to realize safe and secure data utilization for both companies and individuals through a new kind of data distribution. Yet as long as the new mechanism is grounded in the current centralized network, its limitations of dealing with data will become visible when it comes to IoT devices generating enormous amount of data.

We will provide a new option to complement the current centralized services with a decentralized network infrastructure that ensures security and trust.

3. Towards realization of a digitalized society

3.1 Decentralization

As mentioned in the previous capital, various problems concerning personal data need to be addressed and solved. We advocate “decentralization” as the key to the solution. Our idea is to provide a platform where everyone can manage their data based on their own judgement under secure and safe conditions. This includes giving permission of use to others without stress or fear. With the Jasmy Platform, we will be able to realize a society where personal data protection and utilization can be well balanced.

3.2 How to achieve decentralization?

Various companies are currently using digital technology for process re-engineering and to create new value, to break away from their existing business models. Under the slogan “ready-to-use IoT”, we provide the optimal distributed IoT platform to companies via 2 methods:

- Edge computing with its characteristic of a decentralized process to manage IoT connectivity.
- Data management via decentralized network and storage.

Edge Computing :

In the case of current cloud based IoT platform so far, all collected sensor data from devices has become centralized and stored and processed by the system administrator as service provider. On our platform, the devices can process data by incorporating our unique module and the computation itself is decentralized. By shifting the vast amount of data processing from the central server to the edges, the process is distributed and hence the risk of data loss and hacking can be reduced. As each edge can work autonomously, such architecture will be able to cope with vulnerability as well. Furthermore, the edges can work as distributed storage.

Distributed network and storage :

We provide network and storage, by using the decentralized technology such as Blockchain and Interplanetary File System (IPFS). Immutability is one of the most critical components of the blockchain technology which means that data must be consistently written into blocks and all the recorded blocks are impossible to alter. In addition, the data authenticity will be secured by the approval algorithm of the blockchain network instead of a centered third party. All the historical transactions are proved to be true due to immutability and that all the participants trust the smart contract embedded in the blockchain network beforehand. This trust is independent from any special approver with great power or from the proof of exchange, or from certain people, it is distributed network where the exchange can take place safely. It is based on the consensus rule agreed by all the participants. Its democratic feature is a critical element to our pursuit of realizing the Data Democracy.

4. Our solutions

4.1 Development concept

Unlike the current centralized world, we will build an IoT platform suitable for the idea of Jasmy decentralized Data Democracy. Through the Jasmy Platform, we hope to accelerate the use of data and instill the adoption of data democracy in every company.

Ensure the security of data sharing:

During the development of IoT, when traditional blockchain technology is used to guarantee the data security, Jasmy provides the encryption based on machine type from the hardware level, playing a role of double protection of information security. This feature is also reflected in the services like SKC and SG as described below, and its core technology is based on blockchain and a contactless chip encryption technology that has been applied for years in Japan. With a reliable security, this technology has ensured no occurrence of an information security incident in the past 20 years since its birth.

Pursuing the convenience of data utilization:

We believe that data democracy is a society where individuals and companies can provide data to each other without hesitation or stress, not only for their own benefit but also to improve the common good of the society. We will pursue the security of permanent control over all data around oneself as an individual, such as IDs, application logs, and data from IoT devices while keep the convenience for companies to utilize data in a wide-ranging manner if authorized by the respective individuals.

Building a “place” that creates value:

We believe that data that contributes to individuals, companies, and even the whole society needs a place where its value can be recognized. This value shall be built by a democratically decision-making environment and in a decentralized world, rather than being determined by a central authority. We have always been keeping in mind that the Jasmy Platform functions as a place to create value for the data generated.

Contributing to innovation:

Regardless company size, we will always provide a neutral environment where all kinds of companies, organizations, and individuals can utilize the data generated from the Jasmy Platform to boost innovation and to create new value for the future.



4.2 Decentralized personal authentication and data management

The users of the Jasmy platform will have “digital lockers” (personal data locker*) in our distributed storage to hold their data. Important personal data or IoT device data will be stored and managed in these lockers, all events like sharing data to whom and to what extent will be determined by the users themselves.

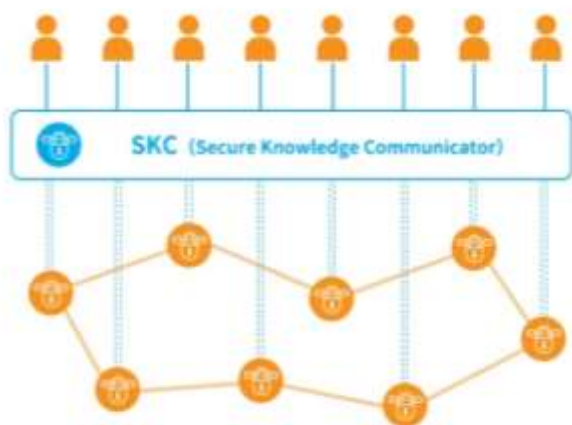
This personal data locker is provided in its main functionality as a “content addressing” solution which allows secure storage of files within the P2P network. The content address hash values of files stored within the decentralized network are managed on the blockchain, so in this way the blockchain be medium of storage. By combining this decentralized storage solution in connection with the user-owned IDs, the weaknesses of a pure blockchain system, in example the incapability of storing large files in a single block, are being addressed and solved.

The SKC is the platform’s core service that allows us to achieve data democratization by creating this kind of personal data locker as a solution to the user to only by themselves control, manage, and trace their personal data.

Secure Knowledge Communicator (SKC)

The main features are as follows.

- Identity Verification (Identification and Authentication: Know Your Customer) and registration functions that enable users to start using the Jasmy Platform and its services.
- The function for users to accumulate and manage their personal data via the JasmyNet upon their own will.
- The functionality that allows companies and organizations to access and use personal data appropriately and only when necessary after obtaining permission from the individual, instead of keeping records in-house.



通过SKC服务为个人建立安全的专属数据柜，并实现分布式存储

The distributed user authentication system provides personal data lockers to the users who have completed the identification and registration procedures and created an ID. The data generated from the user’s activity of each service will be securely stored in a personal data locker that he or she can control. In addition, when providing information to a company, the user will be able to control and track it, including general accepting or denying.

Furthermore, we will solve the inconvenience of digital identity (ID) for

the users. So far it is inconvenient to have different IDs for different services, it is also inconvenient when a service provider disappears, or the credentials are lost. The IDs created by individual users of the Jasmy Platform are not IDs associated with conventional centralized services, but self-sovereign identities, linked to our decentralized storage, and are managed by users with their own authority. In the past, user IDs were limited to services, manufacturers, and applications, but we plan to make it possible for people to freely communicate and trade with others.

SKC service uses the idea of blockchain distributed storage. Based on different user demands, it can be based on the common frameworks like Hyperledger Fabric, Corda and Substrate in the field of FinTech for development, and it is applicable to the different blockchain infrastructure systems in the industry.

4.3 SKC solution use case

Based on this SKC core service, we are currently advancing the development of a decentralized contact center application in cooperation with an incumbent company of the industry to provide a blockchain-based solution.

In the contact center industry, which has an expected market size of 900billion JPY per year, all the companies under digital transformation are urgently required to solve three major issues:

- To build and alter services from enterprise-dominated to customer-oriented (boosting the customer experience)
- To pursue suitable security for global standards (setting global standards for the industry)
- To redesign the cost structure of contact centers (digital transformation: improving operational efficiency)

In order to solve these three issues, we have been developing this first blockchain-based decentralized application (Dapp) for contact centers in Japan to make secure and efficient use of customer data.

By using SKC, a cost reduction with regard to risk management can be expected, because it is not necessary to keep records of customer data for client companies at the contact center side.

In addition, by allowing the customer to grant the operator access to their data in advance, it reduces the time of verifying the call history of the customer and therefore length of interaction, thus reducing labor cost regarding the operators as less operators can handle more customers. As the personal data, usage history, and call logs are stored in the distributed storage environment held by each individual, this enables smooth transaction of information across companies and exchange of device-relevant information with the manufacturer (e.g. customer request to delete or permit to provide information to companies). Beginning with the improvement of operational efficiency, we are expecting new business chances to be created in the future.

By employing SKC, the increase in efficiency requested by companies and the one-stop solution requested by consumers will not only be considered being implemented in one contact center, but also be foreseen as a standard application for the whole industry.

The explosive growth of IoT devices and the amount of data generated from them will be reflected in more and more companies and services focused on data analysis. SKC will be equipped with the basic functionality to realize the concept of decentralization that solves both challenges of data protection and data utilization. It will be the basic service for individuals to manage and utilize personal data, as well as a foothold for companies to deploy data through IoT devices and envisioned to be used as a global standard for data applications.

4.4 A data management service connecting people and IoT devices

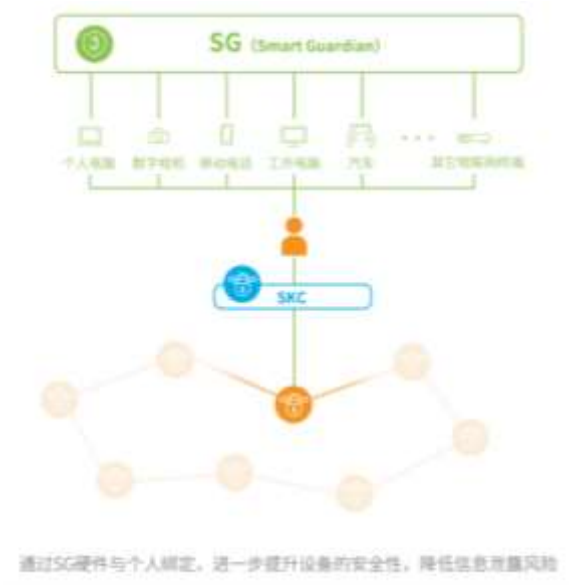
The SG is a core service that allows easy and secure registration of IoT devices on the distributed network, at the same time creating an environment that can only be used by the owner of the devices.

Smart Guardian (SG)

The main functions are as follows.

- A functionality to connect devices registered on a network to their owners without additional personal identification by using the SKC function (Know Your Machine: KYM)
- A function that allows for the device to interact with the owner, such as sending and receiving of measured data from the sensor, and remote control.
- A function that allows the owner to safely store, manage and deploy the data generated from devices within blockchain based distributed storage.

Many companies are providing a vast number of network-enabled devices. In order for all the data generated by these IoT devices to properly create new value and new markets, the data must be credible, reliable, and resilient to identity theft and falsification. The SG is Jasmy's unique technology that links the ID information of the owner using the SKC and the ID information of the device itself. After going through a process of multi factor authentication (MFA), the data generated by the device (hereinafter referred to as "device log") can be correctly linked to the owner. At the same time, device owners and administrators can store device logs using a distributed network to prevent data from being leaked, falsified or manipulated.



In addition, the IoT module developed and provided by Jasmy (tentatively called "Security Management Module") can be incorporated into the development of existing devices to tie them to their owners and administrators, and register the devices into the Jasmy distributed network to securely manage and utilize the device logs.

Mr. Morita, FeliCa project leader from Sony Computer Science Laboratories, is responsible for the development of SG service. FeliCa is a contactless chip encryption technology widely applied in Japan, and with a reliable security, this technology has ensured no occurrence of an information security incident in the past 20 years since its birth. Mr. Morita, as the FeliCa project leader, has also brought his experience in the field of encryption technology to Jasmy service, therefore, greatly ensuring the safety of hardware devices in Jasmy platform.

Mr. Tadashi Morita



He once worked in Sony for years, taking charge of technical invention and commodity development of VTR, disk, IC card, mobile wallet chip, and NFC. Afterwards, he transferred to Sony Computer Science Laboratories to serve as head of FeliCa Enterprise Planning Development Department. Also, he has taken the position of director of Standard Application Department of DEOS Association.

4.5 SG solution use case

Secure Enterprise Service: a decentral PC management service for companies that handle confidential information.

An increasing number of companies are considering strengthening the security of their internal devices, such as laptops and smartphones, in order to prevent confidential information such as important customer information from leaking and from unauthorized exchange within and outside of the company. In the current centralized network, the security measures are facing limitations. To complement the limitation and to strengthen the company laptop security, we are providing the “Secure Enterprise Service” as a concrete device management service for cyber security measures by creating the distributed network environment with SG as the basic API.

As an example, to strengthen the security of the laptops of a salesperson within a cooperation, it requires the following information.

- KYM information of the laptops of the sales department
- KYC information of the central administrator managing the laptops
- KYC information of the employee who use the laptops
- Identification information of the devices that is paired with the target laptops (i.e. smartphone)

The above necessary information will be used for multi-factor authentication and will be managed in the distributed JasmyNet network environment to prevent falsification and leakage. KYC and KYM information will be written into the secure part of the device memory, which can be managed by a central responsible person of the company. Important files and information can be stored safely using the distributed storage that is allocated to each laptop. Moreover, as it is an encrypted P2P structure that does not go through a specific external server, direct conversations, file exchanges and messages can be handled without worrying about data leaks or hacking.

Device data management solution for the smart home

As the number of IoT devices increases, the domestic smart home market in Japan is expected to exceed 4 trillion Japanese Yen by 2025, which provides more comfortable and seamless benefits by linking various household devices, such as AV equipment, ICT equipment and home appliances to the network. (Fuji Chimera research institution, Smart Home City General Survey 2018: www.fcr.co.jp/pr/18096.htm)

Today, manufacturers from a wide variety of industries including home appliance, housing, energy suppliers and telecommunication companies, are accelerating their business to realize smart home services. Therefore, it is important to have rules and regulations in place for the protection and use of data on these network devices and their security, as well as related personal data.

For the companies that are scrambling to convert their products to IoT, or want to accelerate the development of products for the smart home market, our IoT modules that enable device registration on the distributed network, linking data with users and administrators, safe and secure management and deployment by embedding the modules into existing devices, can support this. Even if the existing devices have low processing power, companies can still quickly take advantage of the SG mechanism and Jasmy platform, which serve as the foundation for creating new value from data.

Besides providing solutions for the companies participating in the smart home business, we can also help the local governments that pursue the ‘smart city’ concept by deploying the SG, for SG plays a fundamental part in the digital infrastructure enabling data analyzing and sharing. In terms of ‘remote work’ and ‘work-sharing’ introduced by the Japanese government policy to secure workforce, we also plan to provide the SG mechanism and solutions that enables hassle-free data sharing and managing in a decentralized, safe and secure environment from the perspective of “information management compliance between employees and companies”.



4.6 Applications and products

Transcosmos Blockchain PC

The high-security PC developed by Jasmy for Japan's largest customer service center Transcosmos has used blockchain technology, and the call service application software based on blockchain as well as the SKC service of Jasmy help 21,000 telephone operators to be able to work from home effectively during the COVID-19 period. This product has not only realized the distributed storage of call service-related data, solving the problem of data security during work from home, but also further improved the efficiency of call response through the operator data analysis, providing data reference for clients to reduce their personnel and costs.

Home Page: <https://www.trans-cosmos.co.jp/>

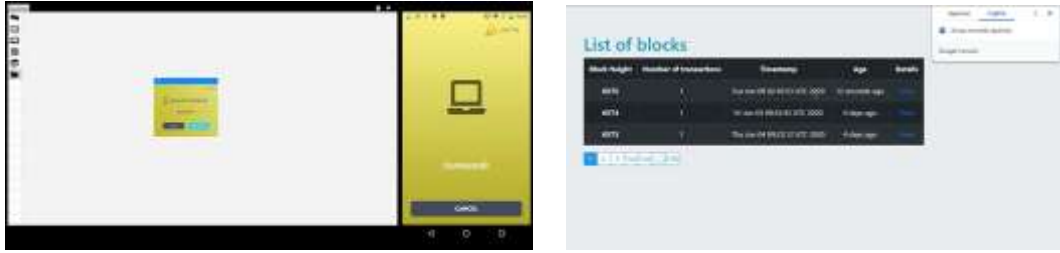


Retrieve the data via Transcosmos Blockchain PC

VAIO Secure PC

As Japan's financial regulator has very high security requirements for the hardware devices including computers used by financial service institutions, the high-security computers jointly developed by Jasmy and Sony VAIO will be widely used in banks and other financial institutions. This product combined with blockchain technology and Jasmy SG has realized the environment of safe use where only the device owner can enable it through bio identification technology and personal password, so that the people in financial industry also can realize telework easily; also based on the distributed storage technology of blockchain, the risk of data theft or attack in the devices is greatly reduced. Once the ordinary terminal devices are unlocked, all the information stored in them will be disclosed, while even if the PC and other terminals installed with Jasmy service are attacked, their risks are controllable and will not cause huge losses to enterprises and individuals.

Home Page: <https://vaio.com/>



Secure PC Demo

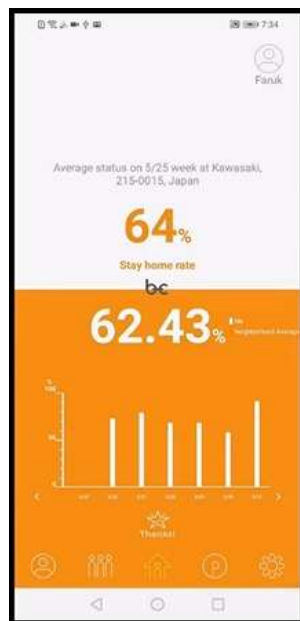
Witz Mobility Service Data Platform

A platform to record the tourist data for Hokkaido local autonomous region has been built by Jasmy together with Toyota and Japan's leading travel service provider Witz, and this platform will be popularized in this region to realize Japan's first commercial pilot of driverless and supporting facilities in the extensive region. This platform can help the government to collect and store the relevant data about users of driverless vehicles, to avoid the personal information compliance problem in Japan. At the same time, this platform can record the different behaviors of tourists, such as the means of transportation, time, distance, shopping consumption and accommodation; and the relevant data can be provided to the local commercial tenants, service providers, and municipal departments for creating new values. Under the technical support of Jasmy, a higher security and flexible retrieval can be guaranteed by enormous data.

Home Page: <https://www.witz-inc.co.jp/>



Connect the data and the owner



Interface of individual data



Share individual data for Jasmy Coin

4.7 JasmyNet

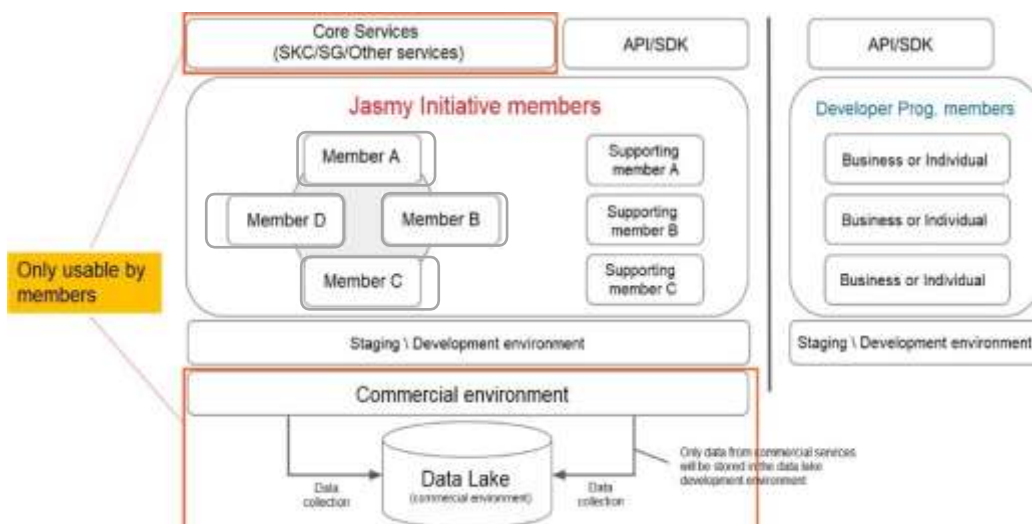
JasmyNet is a network environment in which only authorized member companies of the consortium can participate, who are mainly large-scale enterprises. Based on the participation of all members in the consensus algorithm, everyone can remain in a secure network environment and continue to use it. It is possible to write data, keys, hashes and other records into the blocks. Each company can provide services utilizing smart contracts on the platform, but each company can also provide services utilizing the commonly shared data as we offer the mechanism. This business model is our unique concept and a patent application for this business model is in planning.

4.8 Developer Program

To boost the solution and service development on the Jasmy Platform, and to foster the developers of the next generation, we provide the platform-own Developer Program (hereinafter referred to as “DP”) for developers around the world who are interested in distributed systems. We are preparing an SDK and APIs for development and use of the SKC and SG services of the platform. With the rapid growth of blockchain technology, there is an urgent need to train developers in the field of decentralized applications. We will establish a place where like-minded engineers and planners can concept and create a new world-class Japanese distributed data society by gathering and exchanging information both as cooperating “friends” and competing “rivals”.

4.9 Jasmy Initiative

The Jasmy Initiative has been formed together with companies who will take the lead in utilizing this project, aiming to accelerate adoption of democratic, safe and secure devices that make use of technologies such as IoT, blockchain, and AI, as well as the Jasmy Platform as its foundation. In addition to joint operations, we will carry out activities such as design, proof-of-concept, demonstration experiments, and information exchange, in order to realize a profitable businesses foundation for the platform.



5. Jasmy Ecosystem

5.1 Creation of a data ecosystem

Recently there has been a growing concern regarding data protection. It seems that increasingly, personal data is excessively protected, and companies can find it difficult to utilize and use individual's data. The use of data in companies is dominated by vertical integration and there are many challenges about data sharing across companies. With our core services, SKC and SG, we can offer solutions to these complex problems. We believe that it is important to build a data ecosystem that creates a virtuous circle where both individuals and companies can benefit from the exchange of data.

Personal data cannot be used due to various concerns, the formation of this ecosystem will improve the situation. We can also reduce labor costs and expenses that companies are struggling with. By using an effective reward system, we aim to create an environment that individuals feel they want to participate into data use voluntarily, and companies will be able to provide better products and services by making full use of the data.

5.2 Forming an expandable ecosystem

We will start by attracting end-users for the platform by introducing IoT equipment with the Initiative Companies and by developing new solutions while deploying our core services, SKC and SG. Through the applications on the Jasmy Platform, companies can leverage blockchain to provide innovative solutions, as well as reduce labor costs and server hosting fees. On the other hand, the users can stay reassured while enjoying the services from these companies. Thus, the “data lockers” will spread widely across areas, ages, genders by creating a system that benefits both companies and users.

As the number of the companies participating in the platform grows, so does the number of their users who use their services. The data held by the user will be stored in a blockchain-based “data locker” where the user decides the extent of its use. In order to obtain permission to use the data held by a user, companies need to introduce the user to the content of their services and reward them for its use. Thus, it will be easier for users to determine the scope of data, because the purpose and compensation are clearly defined. This mechanism allows companies to use data across companies, as long as they pay the right prices. Compared to the traditional centralized system, as the ownership of data returns to each user himself, it will be easier to improve the data use across companies. Hence, we can expect more and more companies will join the Jasmy Platform.

With the development of the telecommunication infrastructure based on 5G technology and the spread of IoT devices, we understand that the needs of the Fourth Industrial Revolution will be creating new business models predicated on data and analytics. Therefore, we are confident that our data ecosystem will grow and at a steady pace.

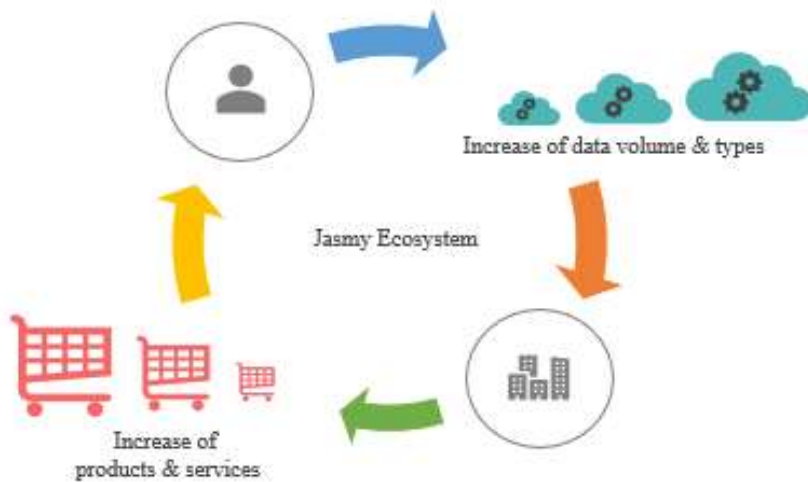
5.3 The strength of the Jasmy Ecosystem

In a digitalized world, individuals do not only act as customers who enjoy the convenience provided through IoT devices, but also as producers who produce varying types of data around the living

environment. We believe that the ownership of these data shall belong to the individuals themselves, not to a centralized corporation.

Therefore, we plan to create an environment where every data producer can select and control service providers and the purposes of data use with regard to their personal data. Companies that use highly accurate data due to customers' control will be able to develop innovative products and services, as well as in-depth and precise management analysis, which will lead to customer number and revenue increase.

When the environment becomes more popular, users who enjoy new products and services will produce even more data, and store even more information in his own "data locker" and reap reward from companies. As a honest explanation and report will be required, the right understanding of data will pervade in companies. This might lead to the link between business results and corporate social responsibility (CSR). This is because the Jasmy Ecosystem will promote CSR. With the emergence of such companies, both the quantity and quality of collected data will rise, so that a virtuous cycle can be created.



5.4 An essential part of building an ecosystem: the reward system

We believe that an effective reward system is essential to build a healthy data ecosystem. Just as personal data has been concentrated in the centralized companies, and these companies that use personal data have dominated the world, personal data turns out to be a new resource just like oil. This increase in use is due to the huge profits that can be generated from its use. We believe it is a fair economic environment in which companies that use this resources (data) pay each data producer a fair price (reward).

On our platform, companies have to clarify the scope and purpose of how they will use data to individuals to obtain permission, and grant rewards in exchange for the data. The rewards need to be offered with concrete value. Individuals will learn and recognize the value of their data through reaping the rewards, and at the same time, they will become increasingly motivated to share it with companies.

As the value of these rewards will be tied to both the quantity and quality of the data, the data producers may have higher consciousness of data when they receive higher rewards or more information from service providers. The idea that personal data will be used in a democratic way in the platform will make people aware of the value of their personal data. Therefore, companies will become conscious of this ecosystem while collecting data and make further use of data.

5.5 The Jasmy token

Our token, “Jasmy Coin”, is a customer token created on the Ethereum platform. It is based on the ERC20 standard. Therefore, it has the mature security performance, processing power and various endurance of the Ethereum network.

The token can also be used by an unspecified number of individuals and businesses to transfer tokens using digital devices, such as smartphones or laptops, as proof of value exchange or payment for assignments and services. By not limiting its purpose, the token can be widely used.

Contract Address :

0x7420B4b9a0110cdC71fB720908340C03F9Bc03EC

Etherscan:

<https://etherscan.io/token/0x7420B4b9a0110cdC71fB720908340C03F9Bc0>

5.5.1 Parameters

- Coin name: Jasmy Coin
- Sign: Jasmy
- Issue of coins: 50,000,000,000 (in words: Fifty Billion Only)
- Data storage type: 18
- Protocol name: Jasmy Coin

5.5.2 Functions supported

Jasmy Coin supports all the functions of ERC20 standard. Please refer to the link. <https://eips.ethereum.org/EIPS/eip-20> for details of the proposal on definition of ERC20 standard and EIP20. According to the standard met by ERC 20, some main functions of Jasmy Coin are listed as below.

Transfer

This function allows address A to transfer a specified quantity of Jasmy Coin to address B. After it's confirmed that both are nonzero addresses (During destruction of coins, zero address is often regarded as a target of transfer by mistake, and in the past, transfer errors often occurred), this function will, based on the amount of transfer, change the corresponding quantity of Jasmy Coins in the corresponding address.

In case of insufficient Jasmy Coins in address A, the transaction cannot be conducted normally,

and the information will be returned to display the transaction errors.

Approve

This function allows address B to transfer a specified quantity of Jasmy Coin from address A. Like the transfer function, the system will firstly confirm that both A and B are nonzero addresses. By use of the function allowance, A can confirm its authorization for the transfer amount of Jasmy Coin from B.

In addition, by use of the functions increase Allowance and decrease Allowance, credit authorization limit can be changed.

TransferFrom

Assume that the address B has, according to approve function, obtained the permission of transfer with an upper limit of specific amount from A, at this time, B can transfer Jasmy Coin to the address C based on the above data.

The same as the functions transfer and approve, this function will change the corresponding amount of Jasmy Coin after confirmation that both the transferor B and the target of transferor C are non-zero addresses. If the transfer amount exceeds the upper limit set by A, the system will report an error. Only the Jasmy Coin with the authorization limit given by A will be deducted in the address A.

5.5.3 Usage scene of Jasmy Coin

Most individuals and enterprises can exchange the coins via smartphone, computer and other electronic devices as the value exchanges and consideration payments to prove the various services. Therefore, according to our ideas, the use purpose will not be limited, and we will allow more people to use such coins in a wider range.

Jasmy Coin has the following functions in the ecological system: (1) The enterprises need to pay service fees for use of JASMY platform, and such service fees will be paid in the form of Jasmy Coin; (2) The enterprises should pay Jasmy Coin as considerations while using the personal information or other corporate information; (3) The Jasmy Coin obtained by individuals from disclosure of individual information to enterprises can be used to exchange the equivalent goods or services on the platforms of JASMY cooperators.

5.5.4 Token Allocation

1) Holding by business companies 15,000M JASMY (accounting for 30%)

The money is planned as rewards to individual users for allowing third parties including enterprises to use their Internet of Things data, and the enterprises are encouraged to actively utilize such Internet of Things data to build economic circle and of ecosphere Jasmy. Once the number of participants and enterprises increases, the platform will also have an increasing popularity, so that the developer will have an incentive to develop more services, to further improve the Jasmy ecosystem. In the initial period, there are no enterprise objects, so no distribution will be made.

Certain benchmarks and conditions should be followed during the practical use in the future.

2) Developer Program 9,100M JASMY (accounting for 18%)

The money is planned as rewards to individual users for allowing third parties including enterprises to use their Internet of Things data, and the enterprises are encouraged to actively utilize such Internet of Things data to build economic circle and of ecosphere Jasmy.

Once the number of participants and enterprises increases, the platform will also have an increasing popularity, so that the developer will have an incentive to develop more services, to further improve the Jasmy ecosystem. In the initial period, there are no enterprise objects, so no distribution will be made. The students and individuals with entrepreneurship or research & development as the goal need to follow certain benchmarks and conditions during the use.

3) Listing expenditures 7,000M JASMY (accounting for 14%)

The money is planned as business operating funds, return on investor relations, legal and tax consulting fees, commission fees for exchange business, and the expenditures for transformation of the blockchain system, etc.

4) Business financing 10,123M JASMY (accounting for 20%)

The money is used for paying commissions and service charges (including principal and interest) to the relevant business financiers, in which 2,000M used for credit repayment has no lockup period, while the remaining part has a lockup period.

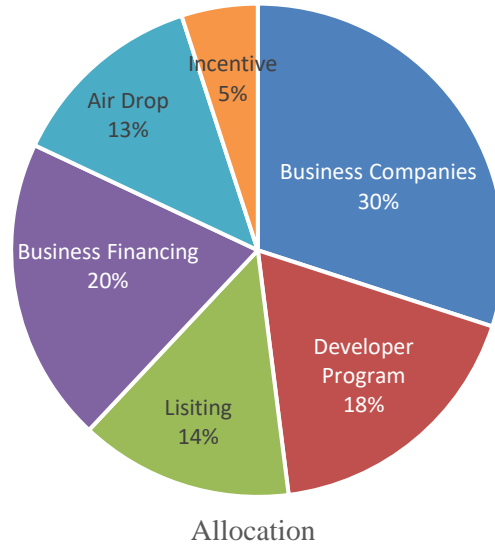
5) Air Drop 6,377M JASMY (accounting for 13%)

Such money is used for ensuring the liquidity for investment institutions and foreign companies, the promotion of individual investors in the exchange as well as the further stimulation of investor demands. 5,000M for institutional investors has a lockup period, while the part for individual investors has no lockup period.

For the investors holding an exchange account, their distribution will be lower than the unit of minimum transaction volume in the market. The funds will be used for Secure PC's customer customization function expansion and application development, building and strengthening of service management systems, investment in research & development, personnel strengthening, and building of data value mining system.

6) Incentive 2,400M JASMY (accounting for 5%)

The money is used as incentives to corporate business creation, platform development, financial activity, listing application and other business contributions. When such money has a lockup period, the corporate entrepreneur team's benefits are limited while being listed, and the personal distribution of team members should be made public.



Change of Shareholders

Listing	Government and local public bodies	Financial institutions	Cryptoassets traders	Other corporate bodies	Overseas corporate bodies	Individual	Issuer's directors	Total
Number of people holding the funds	0	0	1	270	0	125,080	2	125,353
(person)	0	0	500	15,000	0	26,320	8,180	50,000
Quantity of holding	0.0%	0.0%	1.0%	30.0%	0.0%	52.6%	16.4%	100.0%

3 years after Listing	Government and local public bodies	Financial institutions	Cryptoassets traders	Other corporate bodies	Overseas corporate bodies	Individual	Issuer's directors	Total
Number of people holding the funds	0	15	5	300	20	2,000,000	2	2,000,342
(person)	0	15,000	2,000	10,500	10,000	8,000	4,500	50,000
Quantity of holding	0.0%	30.0%	4.0%	21.0%	20.0%	16.0%	9.0%	100.0%

5.5.5 Necessity of Jasmy Coin

Jasmy's related technologies and coin issuance plans have been preliminarily approved by Japanese authorities, including the Virtual Currency Exchange and the Financial Services Agency. Moreover,

based on the company's rich industry resources and relation networks, the products and services initially developed are expected to become the industry benchmarks in personal information data management and financial industry data regulation in Japan. This will further establish the status of Jasmy as a market leader, so that Jasmy will quickly occupy the market shares, and also this will create favorable conditions for establishing the ecosphere with Jasmy Coin as transaction money.

Any enterprises that want to meet the data security regulatory conditions or reduce the information security risks must purchase the company's related services and products via Jasmy Coin, and also the individuals can provide their personal information and data to the trusted enterprises for exchanging Jasmy Coin, and also the individuals using Jasmy Coin can exchange corresponding products and services from the commercial tenants, so as to form a virtuous ecological cycle.

5.5.5 Others

- 1) Use language: solidity v0.5.15
- 2) Library: OpenZeppelin v2.4.0
- 3) Code audit: The results of detection with MythX tool of Consensys have no problems.

```
pragma solidity 0.5.15;

import "@openzeppelin/contracts/token/ERC20/ERC20.sol";
import "@openzeppelin/contracts/token/ERC20/ERC20Detailed.sol";

contract JasmyCoin is ERC20, ERC20Detailed {
    constructor (
        string memory name,
        string memory symbol,
        uint8 decimals,
        uint256 initSupply
    )
        ERC20Detailed(name, symbol, decimals)
        public
    {
        _mint(msg.sender, initSupply);
    }
}
```


6. Data Marketplace

As a platform business, we aim to create a global data marketplace that enables individuals and businesses alike to safely, securely and conveniently exchange data, and foster innovation that creates new value to data beyond the boundaries of businesses and industries.

One characteristic of data is that, unlike physical assets such as oil, it can be utilized by multiple parties at the same time. Data that has no value to one person may furthermore be of high value to another. We are convinced that an environment where data is produced and held by individuals and can safely and fairly be used on the marketplace, enables near-infinite possibilities in the future.

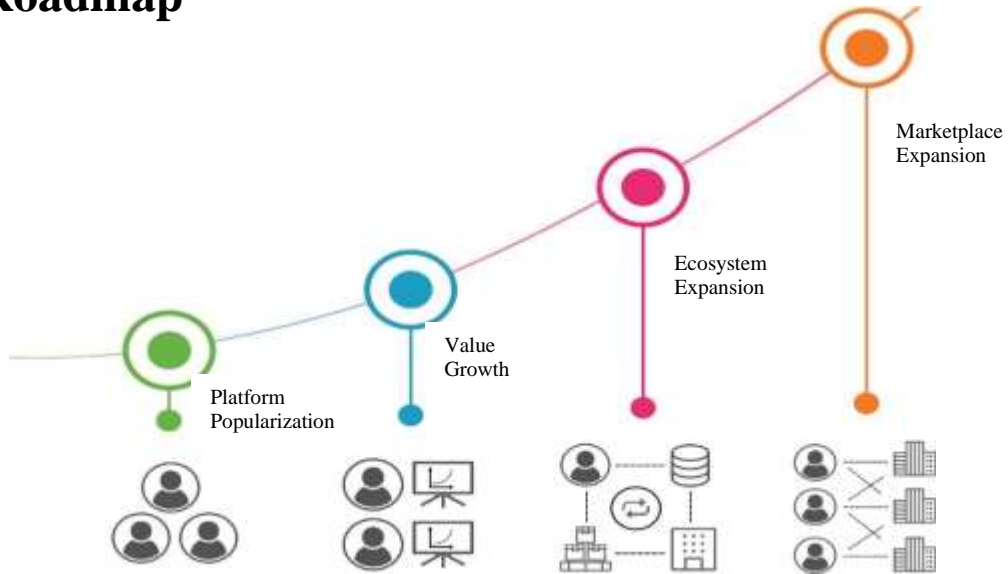
With the advent of the age of IoT, our first business focus is the contact center service solution and the development and sales of a PC for businesses. We will gradually expand the userbase and amount of personal data that can be exchanged on the platform by providing various solutions to different industries.

In particular, since the demand for real-time data through IoT devices accumulated on the platform is expected to be extremely high, the number of companies participating will be expanded based on the introduction of “Ready-to-use IoT”. The number of individual users will increase with the range of new products and services provided by companies, and the number of participating companies can be expected to further increase for the purpose of utilizing data produced by individuals.

This decentralized and valuable personal data needs an environment where it can be used safely and securely, and on this platform, individuals have the right to receive appropriate rewards for providing such personal data. This environment that creates this transparent use and appropriate rewards for data access permission is the Data Marketplace. We will move forward so that individual users can easily and safely use the platform and have abundant functions in the marketplace.

With the increasing awareness of privacy and protection of personal information throughout society, we believe that there is an even higher demand for our platform. Global technological advances in the field of data analytics, AI, machine learning, and deep learning indicate that free and fair data sharing will become a global trend in the future, giving optimal conditions and high growth potential for our data marketplace solution.

7. Roadmap



Beside innovation in developing a democratic decentralized network platform, we also support companies that aim to realize such a data marketplace where valuable data can be securely traded.

Apart from individuals trading their data with companies for rewards, businesses can strategically share and trade valuable data amongst each other, creating a starting point for new service models based on data utilization.

First phase: Platform popularization

During the popularization period, we will attract end users to the platform by actively introducing IoT devices and developing new solutions in cooperation with initiative companies and utilizing the platform's core technologies SKC and SG. Companies can offer blockchain based services through development of applications on the platform while at the same time achieving cost reductions on labor and server fees. On the other hand, the individual users enjoying the platform services can do so with highest sense of security. The underlying mechanism of benefits for both companies and users and an increasing offer of different kinds of services will built the foundation for the rapid growth of "data lockers" and participants of all regions, ages, and genders.

A large numbers of end users will be connected to the platform via call center solution. This first business solution in partnership with contact centers allows anyone to easily contact their support services via various communication tools such as telephone, mail or chat, and gives us the possibility to familiarize the end users with our data-focused philosophy. Our contact center solution is being developed and tested together with the country's largest provider in the field and can be expected to be adopted as a standard application for call centers throughout the industry. In this way, we are intending to increase the number of data lockers in the early stages by rapidly extending the offered decentralized environment for consumers who use the products and services of the platform's initiative members.

Now, we have reached an agreement with Japan's large customer service call center

TRANSCOMOS, importing the personal computer installed with Jamy technology application service, to help the staff and employees of TRANSCOSMOS to effectively work from home during COVID-19 period, and also conducting decentralized storage of the customer data, to solve the problem of information security of customer data. We have also reached a business cooperation agreement with SONY, agreeing that the hardware products carrying Jasmy technology will be widely applied in the financing institutions and consumer service industry in Japan, to help the corporate customers to perfect the data information security system. In the platform popularization period, we plan to develop 30 corporate customers in the first year.

Second phase: Value growth

In the second phase, we will focus on promoting the classification and volume of personal data that can be exchanged, while steadily increasing the number of users. During this growth period, we will more and more focus on increasing the number of companies participating on the platform, summarizing successful cases from the popularization period, utilizing our network effects, we will actively promote the development of new products and services with companies in various industries, all with their different and individual user-bases. With an increased number of companies participating on the platform, the number of individual users will also increase, and by incentivizing this extended user-base via rewards and offering of a clear value to their data, utilization will start to transcend company and industry borders, again giving new types of companies the motivation to participate on the platform.

With the increasing number of participating companies and number of data lockers expanding gradually, the types of products and services on the platform can diversify and grow a rich variety of data never seen before. Individual users can recognize the complexity of personal information, such as shopping history and insurance contract information, that they have unconditionally handed over to companies up until now, while at the same time realizing that the value of their data is increasing with the potential of usage and abundance of it.

At this stage, we will further expand the range and scale of corporate customers, and the hardware manufacturers, service providers, and even more local governments and community service platforms will be the objects of our services. At present, we have started discussion with Hokkaido local autonomous region on how to effectively use the tourist data to provide efficient transformation and entertainment experience services, to drive the local service providers to realize economic development jointly. We estimate that there will be more than 300 enterprises and organizations taking part in the Jasmy platform business in the value growth stage.

Third phase: Ecosystem expansion

Once personal data has grown to a point where it can create value, the environment in which individuals are fairly compensated for providing their data will be established. By being rewarded for disclosing data to companies, the users are incentivized to participate in the data ecosystem. At the same time, we stay in a neutral position to the system and do not collect and hold data in a centralized way. By facilitating and increasing these kind of data exchanges for rewards, people will naturally become

familiar with the true value of their personal data and collect and use it with awareness of the surrounding ecosystem. We are merely establishing and providing this ecosystem that builds the environment to safely and securely utilize all personal data.

Through the constant exchange of data and rewards, people have a new understanding of the value of personal data and can consciously collect and use intelligence. The personal data environment can be utilized safely and reliably, so that an ecological system is thus established. In this process, the individual users will constantly experience the values and benefits of personal information sharing and take part in the data transaction more frequently; with the increase of active enterprises and service providers in the ecological system, Jasmy Coin will have richer usage scenarios. Individuals will use the Jasmy Coin obtained as the rewards for data information sharing to exchange different services at the places of service providers, and enterprises will invest in a new round of data analysis and service upgrades after obtaining Jasmy Coin, and during this period, Jasmy Coin will have a greatly increasing liquidity and value. We expect about 1,000 enterprises and 6million individuals will take part in the platform's data transactions by then.

Fourth phase: Marketplace expansion

In the Jasmy platform ecosystem, personal data is being stored in a secure, distributed way and is the property of each respective person. It needs an environment to be safely and securely managed, and any individual needs the right to receive appropriate rewards for providing their personal data. The environment and fundamental service that realizes this transparent use and rewards upon granting access permission is the Jasmy Data Marketplace. We will promote development so that individual users can easily and safely grant data licenses on the platform and have an abundance of functions in the marketplace. The purpose of this project is not only to exchange data between individuals and companies, but also creating the possibility to strategically share valuable data among companies, and to be the starting point for creating value and new service models.

We aim to achieve that all people, goods, and services will be interconnected, and all personal data that is closely related to people’s lives, down to the fundamental needs of “clothing, food, housing and transportation” will be given back into the hands of the original owners.

Jasmy Community Size

Item	Now	Year1	Year2	Year3	Year4	Year5
# of companies using Jasmy Platform	6	30	100	300	600	1000
# of device sold	3,000	16,000	30,000	50,000	70,000	100,000
# of users sharing individual information	529,100	529,100	1,578,600	2,483,600	3,488,600	5,693,600
<i>Secure PC business</i>	426,600	426,600	1,266,600	1,866,600	2,466,600	3,666,600
<i>New Normal business</i>	2,500	2,500	12,000	17,000	22,000	27,000
<i>Award/SNS/Event</i>	100,000	100,000	300,000	600,000	1,000,000	2,000,000
Jasmy ecosystem potential user	85,000,000	85,000,000	85,000,000	100,000,000	100,000,000	100,000,000

8. Team Introduction

8.1 Core Team

Our management team consists of former Sony executives who have continued to create innovative products. Representative Director Kunitake Ando, who has always held an entrepreneurial mindset and has driven innovation since his days at Sony. He has a wealth of experience in establishing new business models, including the launch of Personal Computers under the VAIO brand and Sony's life insurance business. President & CEO Kazumasa Sato has years of experience in identifying market needs, marketing them accordingly, and scaling them up. Executive Vice President Masanobu Yoshida has many years of experience in technology R&D at large companies, including senior executive roles. CFO Hiroshi Harada is a Japanese CPA well versed in corporate governance and financial accounting, especially in the IPO process.



Representative Director Kunitake Ando

Former President and COO of Sony Corporation, President of US Sony Engineering and Manufacturing of America, Chairman of Sony financial holdings, Chairman of Sony Life Insurance Co., Ltd., Chairman of the Japanese Ministry of Economy, Trade and Industry's Frontier Jinzai study group, assumption of office as CEO of Jasmy in April 2016. Current Director of the Japan Innovation Network Institute. Chief Director of the University of Nagano.



President & CEO Kazumasa Sato

Former CEO of Sony Style.com Japan Inc., Operating officer of Sony Marketing (Japan) Inc. and President of Sony Style Company, managing director of Sony Style Japan and operating officer of Sony Marketing Inc., Head of the Sony Corporation Creative Center, Chairman of BJIT Group, joined the Jasmy Board of Directors in April 2016, CEO of Jasmy Incorporated from November 2018.



Vice President & CTO Masanobu Yoshida

President of Sony Corporation Handheld Computer Company, Sony Ericsson Mobile Communications (now Sony Mobile Communications Inc.) Department head, Managing Operating officer of Softbank Mobile, General Manager of product services etc., currently CEO of Dreamforest Corporation. Jasmy board as vice president from April 2016.



CFO Hiroshi Harada

After passing the Japanese CPA examination in 2008, he joined KPMG AZSA LLP. He has been engaged in statutory auditing for listed companies across industries, including broadcasting, construction and manufacturing, as well as IPO support services with which his client successfully went public. After 11-year experience at auditing firm, he joined Jasmy as CFO in January 2020. In addition to managing accounting, finance and taxation, he is also responsible for investor relations.

Alongside these experienced leaders, the Jasmy project consists of a multinational team working actively together as we foresee a future in global development.

8.2 Other Members

Tax Advisor **Ryuji Yabe**

- 03.1959 Graduated from Secondary Law Department of Hosei University
- 04.1953 Joined General Affairs Department of Kumamoto Tax Bureau
- 07.1977 Deputy Head, Kojimachi Tax Office (Responsible for Corporate Tax)
- 07.1979 General Investigator, Third Department of Tokyo Regional Taxation Bureau
- 07.1981 Director, Third Legislative Research of Direct Tax Department of Tokyo Regional Taxation Bureau
- 07.1983 Head, Arakawa Tax Office
- 07.1985 Director, Corporate Tax of Direct Tax Department of Tokyo Regional Taxation Bureau
- 07.1987 Director, First Human Resource of General Affairs Department of Tokyo Regional Taxation Bureau
- 07.1989 Chief Internal Inspector, Commissioner's Secretariat of National Tax Agency
- 06.1991 Head, Kumamoto Regional Taxation Bureau
- 09.1992 Established Chuo Goutou Firm (Tax Consultant)

Legal Advisor **Hidenao Toyoshima**

- 09.1962 Passed the National Bar Examination
- 04.1990 Director, Public Security Department of the Tokyo District Public Prosecutors Office
- 09.1991 Director, General Affairs Department of General Public Security Intelligence Agency
- 04.1994 Chief Prosecutor, Nagasaki District Public Prosecutors Office
- 07.1995 Chief Prosecutor, Kumamoto District Public Prosecutors Office
- 04.1996 Chief Prosecutor, Urawa District Public Prosecutors Office
- 02.1997 Chief Prosecutor, Osaka District Public Prosecutors Office
- 12.1997 Director-General, Public Security Intelligence Agency
- 01.1999 Superintending Prosecutor, Takamatsu High Public Prosecutors Office
- 11.2000 Superintending Prosecutor, Fukuoka High Public Prosecutors Office
- 10.2001 Registered as a Lawyer (Tokyo Bar Association)

8.3 Strategic Business Partner



Jasmy株式会社

2020年9月

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