[Q&A Session]- Business Presentation (Held on December 10, 2018) -

Questioner 1

- Q1. I would like to confirm the commissions and charges you receive. It is said that your high commission fee, which I guess is fixed, could hinder your business expansion in the future, given the fact that cashless payments for small amounts have become popular. Please show me your future vision of the commissions.
- A1. I am going to explain the commissions we receive. For example, we receive a certain amount of commission from a financial institution or credit card company for each authorization. The amount has been included in the agreement with the client. Although we cannot disclose the specific amount, the amount for one transaction can be anything less than five yen. Therefore, for example, if the payment amount for a transaction is 1,000 yen, we receive a commission of around 0.X% of that amount. If the payment amount is far higher than 1,000 yen, the percentage of commission on the amount is much lower. Given that the average credit card usage fee processed by CAFIS transactions is between 5,000 and 10,000 yen, we understand that the commissions we receive are not so expensive at present.

On the other hand, given the expectation that cashless payments for small amounts will become more popular in the future, even with a commission of several yen per transaction, if a payment amount is as small as 100 or 500 yen, our percentage of commission will be higher for that amount. Various views on this issue are under consideration. For example, one view would be to charge a rate representing a certain percentage of the payment amount; another view would be to receive no commission at all for a payment amount under a certain level. For credit card payments, however, credit card companies have pre-determined merchant commissions. Under such circumstances, while we have ongoing negotiations with credit card companies, it is difficult for us to implement these solutions in a single step.

With regard to J-Debit, if the total number of J-Debit transactions annually were as low as 10 million, some companies would attempt to lower commissions for small-amount payments, based on the idea that some users who currently pay in cash would use the service for smartphone payments or EC. From newspaper reports, we have learned that banks are considering similar moves.

While keeping an eye on these trends, we are considering measures to promote cashless payments with various players. We hope that we will be able to provide a clear explanation of this matter in the near future.

Q2. With various new payment methods emerging, many people misunderstand and argue about the differences between QR code payments and CAFIS. For the "as required type" shown on page 28 of the presentation

material, however, I understand that, when a credit card or a bank account is used to make the actual payment, your CAFIS will be used to implement the payment, even if the person has chosen a QR code payment. When it comes to the question of "charge type," on page 29, it seems that a certain kind of payment will be processed without using your CAFIS. I think that the system is too complicated and difficult to understand. Please explain how your service will be used in conjunction with "PayPay" and "d-Barai," major examples of QR code payment services.

- A2. Please forgive me for answering your question at a general level, instead of providing a detailed explanation of the mechanisms used by specific brands, such as "PayPay" and "d-Barai."
 There is a route that uses our CAFIS even for services called XX Pay using a QR code interface, if that payment is made using a credit card, because a credit card transaction will be triggered. However, the method varies from one case to another because, in most cases, the acquirers choose the route.
 Recharging from bank accounts is processed through our "Online bank transfer acceptance GW" and "Real-time payment GW." JCN (CARDNET), our competitor and an affiliated company of JCB, provides similar services. We also know that some banks process recharging by themselves.
- Q3. I think that you will be able to handle all types of code payments without using CAFIS if you acquire a significant share in the "code payment GW" market, which you start to provide in the spring of 2019. However, I think that it would be too late to begin the service in spring, 2019. I would like to hear your views.
- A3. We will aim to handle all types of code payments and to capture needs for a new payment method, which will emerge after we start to provide the code payment GW service. We really appreciate and acknowledge your view that we should start the service as soon as possible, and we will continue to take prompt action as much as possible.

We have made efforts to handle code payment services provided by overseas companies as well as domestic companies. We are developing solutions for well-known overseas pay brands such as "ALIPAY" and "WeChat" in China, "PROMPT PAY" in Thailand, and "Paytm" in India, where we have a partner company. We are already supporting "ALIPAY" and "WeChat" with various services of CAFIS and we intend to do so with the code payment service as well. We will also proceed with support for other pay brands in cooperation with our global offices.

Questioner 2

- Q1. I understand that you charge a commission of several yen for each transaction. I have heard that the government has asked credit card companies to lower the rates of commission they receive from merchants. About how much have you been asked you to lower your commission so far?
- A1. The credit card companies have been asking us to lower our commissions in agreements for the past 10–20 years, which means that this is not a new issue at all. As newspaper reports have shown that there is an increased social interest in commissions, we expect to receive a request to lower commissions, too. Please note that we are seeking a reasonable way to lower and determine prices, taking into consideration various scenarios, such as an increased transaction volume, due to the expanded use of cashless payments; or an increase in the number of member stores via credit card company introductions. It is not a matter of simply accepting the request. Also, since each credit company has individual circumstances, we are conducting completely separate negotiations with each credit card company.
- Q2. Please provide a supplementary explanation about profitability. I think that revenue will increase if there is an increased number of transactions. Do you assume a scenario in which you will make a short-term upfront investment to support diversified services? Or do you expect to achieve short-term profitability because the investment amount is relatively small, compared to the revenue?
- A2. In recent years, the authorities have imposed stricter security regulations on companies. Under these circumstances, we have significantly increased investments related to security. Furthermore, with new payment methods, such code payments, emerging in spectacularly and developing very rapidly, we have made more upfront investments than ever before.

While the business grew by about 10% in terms of the number of transactions, the growth of investments has significantly outpaced business expansion. Even under these circumstances, however, appropriate investments will protect some businesses and allow us to take an aggressive approach to member stores. Therefore, please understand that we are making aggressive investments appropriately, in a balanced way. Although we cannot disclose specific figures, we are making investment efforts with that mindset.

Also, to keep the entire business in balance, we have created a new source of revenue by charging merchants at a set rate or based on a fee per one non-CAFIS transaction. This income is in addition to the traditional fee schedule for CAFIS transactions. Therefore, please do not think that the profit margin will deteriorate simply because of a fee reduction.

- Q3. I understand that NTT DATA and JCN (CARDNET) have a majority share in the domestic payment infrastructure market. As I cannot see any difference in the strength of these two companies, how can they be differentiated from each other? Please explain your advantage over JCN and tell me whether there is room to increase your market share.
- A3. It is hard for me to answer since this is such a difficult question. Currently, we understand that we have more than about 60% share of the market, and the remaining market share is divided between JCN and other companies.

With regard to differentiation, you may think that NTT DATA and JCN are similar because both companies provide similar services. Meanwhile, we believe that the reason why we still have a significant advantage over JCN is that we are connected to almost every bank and credit card company, as a result of our 35-year promotion of CAFIS as a payment site and platform. While JCN provides a real-time bank account transfer function, the company is only connected to a limited number of banks. In terms of credit card companies, although you may think that the number of credit card companies connected to JCN has steadily increased, reaching the same level as NTT DATA, not all credit card companies are connected. For these reasons, we think that we have an advantage over JCN.

Moreover, while JCN is run by a JCB-group company, NTT DATA has ensured fairness to all sides and established a fifty-fifty relationship with various parties. With this background, we have worked on solutions to all types of code payments and built links with overseas players, which we think is our strength. As a result, we have maintained our market share and will aim for a higher level. As I told you before, although we expect to see more non-CAFIS transactions, with the emergence of new payment methods, we will aim to work with PSPs for merchants and to expand the business in the future, keeping the overall balance.

From the standpoint of a merchant, it is not easy to change a network infrastructure, due to migration costs. In many cases, credit card companies install credit card terminals at the merchants at their own expense. However, it is quite difficult for the card companies to replace the terminals easily, given the impact on their financial performance. Against this background, we are working to diversify payment methods in order to improve our services in appropriate ways and to, take advantage of contacts with existing clients. In addition, we believe that our major goal should be to build up value-added services.

As being a division of NTT DATA is another one of our advantages, in the midst of worldwide digitalization, we think that our ability to provide payment solutions, combined with various services for ordinary companies, constitutes significant added value. Merchants are also required to change their UX (user experience) to address

the labor shortage, implement work-style reform, digitalize the purchase experience. For them, we will be able to provide various mechanisms that can help them achieve total digitalization, including self-payment, payment in fitting rooms, and payment at shelves, as well as seamless payments for an O2O (Online to Offline) service between an EC site and a brick-and-mortar store, enabling consumers to make payments quickly and easily on the spot. We think that this capacity differentiates us from others.

- Q4. As the payment infrastructure is a major social infrastructure, I think that the relationship with the national government will be important. I heard that a member of the Payments Japan Association, which was recently established, told a meeting that CAFIS costs were relatively high. What is the focus of your discussion with the government at present?
- A4. We have not heard that any member of the Payments Japan Association told a meeting that CAFIS costs were relatively high. A Ministry of Economy, Trade and Industry (METI) report on Cashless Vision clarified the costs of switching networks, which we believe you understand well.

We have discussions with METI and basically share recognition of issues with them. We and METI aim to cooperate to expand cashless payments in Japan. We are discussing specific measures with the ministry, including measures to lower the price of terminals and reduce fees for switching networks. We will cooperate to implement these measures. As a result, the widespread adoption of non-cash payments will lead to the growth of our business, in our view.

Questioner 3

- Q1. You have told us earlier that you have considered introducing commission rates and making transactions with payment amounts under a certain level free of charge, for example, in light of the potential expansion of small-amount payments in the future. Do you think that a review of commissions would have a short-term impact on your business performance, in terms of revenue? For example, do you think that the increased number of cashless payment transactions will have an inevitable short-term impact which will be eliminated in the future? Do you think that an increase will have a small impact only, from the view of the average unit price? I would like to hear your view.
- A1. Even if cashless payment transactions increased in the short term, if we provide services free of charge, it will naturally have an impact on business. However, we believe that we can increase revenue, depending on the volume of increased transactions, by modifying the commission structure to allow us to receive a percentage-based commission, for example. For this reason, we believe that the short-term impact will be minor.
- Q2. I would like to ask you, as a system integrator, what you think an appropriate rate would be? I believe that, from a system-development perspective, you can establish an investment recovery plan, based on how much return you expect to earn from your total investments in system development. You have told us that you've made more upfront investments in security and new payment-method solutions. On the other hand, I think the development cost for the main parts of CAFIS must be almost zero because you began that development work about 35 years ago. Do you ensure a certain level of profit margin? Or, is the profit margin not very high because you still make step-by-step investments above a certain level each year? It may be difficult for you to provide me with a clear answer, but I would be glad to have a clue, based on the relationship between your development costs for the main parts, the business scale at present, and upfront investments.
- A2. I cannot give you a clear answer to that question about the CAFIS profit margin. With regard to the development cost of the main parts, we are still carrying out hardware migrations and adding business functions. For example, since CAFIS is a system that has a material social impact, we have developed multiple centers to avoid system failure and built a robust system, in terms of hardware and network structure, so that all transactions can be processed, even if only one center is operating. We continue to make investments in upgrading hardware, networks, and software continuously. In addition, we have spent funds on system-operation expenses and invested in building a security mechanism to protect the system from cyber attack, as I mentioned before. Given these factors, I hope you will understand that we continue to bear a certain level of expense in order to operate

CAFIS in a continuous and stable fashion.

However, if I am asked whether the growth of investments is higher than the growth of payment transactions, I would answer, "No." As payment transactions are growing faster than investments, of course we can secure revenue.

On the other hand, we have to work on solutions for peripheral services, involving CAFIS and CDS (Credit Data Transfer System), while making defensive investments. Otherwise, we would lose the factors that differentiate our network from those of our competitors, including JCN. We will protect our entire services by removing obstacles, while continuing to make investments.

Furthermore, as the whole NTT Group, various departments carry out a wide range of studies. For example, we work for an R&D element to determine what we will be able to do with blockchain technology. We allocate investments by looking toward the future to achieve further business growth.

Questioner 4

- Q1. Do you think there is any business risk that international brands will construct a scheme to bypass your solution in Japan in the future? Based on the diagrams on pages 28 and 29 of the presentation material, it seems to me that a credit card company can link directly to merchants without using CAFIS. For example, I am afraid that the role of middle layers, such as CAFIS, could be reduced in Japan because payment agencies, such as in overseas payment schemes, assume a bigger role and introduce more mechanisms to reduce the overall cost of commissions. What do you think about that possibility?
- A1. I think that international brands are naturally working on plans to link with merchants directly, without using CAFIS. I have heard that such services are already being provided overseas. We believe that there will be an increased number of such services developed in Japan, too.

On the other hand, it is not desirable for merchants to accept only certain credit card brands. As consumers use a range of different methods to pay for goods and services, member stores want to provide a means that will address all payment methods and avoid losing any opportunity. We think it will be very difficult for a small group of brands to develop schemes capable of processing every type of payments. We conduct front business partly because our merchants do not have enough employees to manage system information. While strong, largescale merchants can afford to hire several full-time system-information employees to address various types of payments, most merchants want an easy mechanism that requires less commitment. We therefore believe that merchants will recognize our value if we provide them with payment-related services, as well as front-side capability.

- Q2. You told us earlier that you would acquire transaction data through CAFIS and provide it to merchants. Do payment agencies and CAFIS acquire almost the same data? Or, does CAFIS acquire more data than the payment agencies?
- A2. When it comes to simply processing payment transactions, the data collected by CAFIS are almost the same as those acquired by payment agencies. In some cases, however, a payment agency collects additional data as well as traffic information.