Interview with Minoru Niimura, Director of Hewlett-Packard Japan, Ltd.

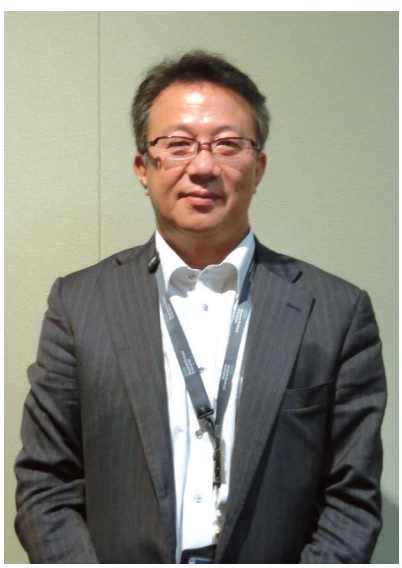
FinTech — Another IT Revolution

By *Japan SPOTLIGHT*

The word FinTech was never heard a few years ago, but today all of us have heard about it. It is considered an integration of IT and finance. For example, mobile banking is now commonplace and this involves financial transactions like payments, deposits, loans, etc. being done by a smartphone and not by a bank. Will banks be replaced by FinTech? This would mean a drastic change to our business culture and economy. It would also mean a possibly significant expansion in new business opportunities in finance taking full advantage of IT. We had a chance to discuss these issues with Minoru Niimura, a distinguished IT businessman working for Hewlett-Packard Japan, Ltd. a Japanese subsidiary of the huge IT multinational.

Introduction of Hewlett Packard

JS: Hewlett Packard (HP) is well known as a global IT vendor. However, my impression is that your principal business today seems to be becoming service oriented rather than hardware supplier. What do you think about the recent trend of your business?



Minoru Niimura, Director of Hewlett-Packard Japan, Ltd.

Niimura: At this moment, IT business has two main streams. One is like a department store business selling all kinds of products and services by integrating all kinds of business through M&A. The other is a business model with the focus on specific types of business. HP was split up last November into Hewlett Packard Enterprise (HPE) engaged in enterprise operations and HP Inc. engaged in PC and printing operations globally. We opted for this in order to raise the speed of the decision-making process to deal with the two different market needs, the enterprise market and the consumer market. Meg Whitman, CEO of HPE, told us a long time ago that we should increase the weight of services and finally announced in May 2016 that HPE would spin off its service operations in 2017. HP has adapted well to a system of responding to the market as quickly as possible by implementing effective investment in specialized areas. Each spin-off company, though separated into different specialties, is pursuing synergy among these different spin-offs.

I am in charge of the department that focuses on service operations in HPE relating to the industries of financial services, healthcare and life science, communications, media and entertainment. It has often been pointed out over the past few years that hardware products have become commodities. Thus, our business clients now think there will be little difference among products from all producers. In particular, after the emergence of cloud computing they are not sticking to any specific hardware in their purchase of computers. Therefore, at HPE we are now thinking about creating added value by development of service operations as well as technology to make a distinction among all the hardware.

FinTech in Our Daily Lives

JS: New financial services not provided by banks are now available in Japan, such as Paypal or "au wallet", thanks to FinTech. How far has FinTech penetrated into daily life in Japan?

Niimura: We often see news articles on FinTech today in popular Japanese journals, not only those for IT businessmen. There is more and more news on Japanese megabanks working seriously on FinTech business. For example, the news earlier this year that the Bank of Tokyo-Mitsubishi-UFJ would issue its own virtual currency called "MUFG coin" in the autumn and start using it for settling accounts attracted growing attention. Also, on Aug. 22, the Nikkei newspaper carried a front-page item that the Bank of Tokyo-Mitsubishi-UFJ and Hitachi, Ltd. would start an experiment for settling accounts of electronic checks by using a blockchain in Singapore.

Looking at "settling accounts" transactions so far, since there are so many entities involved in them they have never been done at high speed. For example, in the case of settling accounts for stock

exchange transactions it has been believed it would take at least three days. FinTech could make it happen more quickly. For the users of FinTech, a quick transaction at a cheaper fee could be achieved by skipping all the existing procedures and using a totally different route.

In Japan, we use credit cards less often than in the United States and Europe and an individual consumer uses a check much less often. In this regard, FinTech may not seem to have been making much headway in our society. However, smartphones are widely used and we can expect them to work as a medium for FinTech, so that new services using the Internet could be born through smartphones and this could lead to transactions using virtual coins and blockchains. I believe we will see more new services emerge given the spread of smartphones in Japan, though at this moment this area looks underdeveloped.

JS: How has FinTech become so deeply integrated into our lives? We have had an IT revolution for two decades and the landscape of our office life has rapidly changed, but has this also affected the world of finance by IT being used for settling accounts?

Niimura: Yes. I think reform of the workplace will need IT technology to support it. For example, VDI (Virtual Desktop Infrastructure), thin clients and smartphones are technologies that have a common basis, so the fundamental IT supporting a wide range of services should be of a universal nature. We will see a variety of business models depending upon new ideas or operations to be added to this basic technology.

JS: I only heard about FinTech about one year ago. How long has this term been used?

Niimura: It was about two or three years ago when IT business people started talking about it. We had contact with companies producing new solutions through our business, and in our conversations they talked about IT and finance in London or Silicon Valley. At that time such topics were not so related to our own business, but it is amazing now that we feel so close to this issue. The waves of FinTech have reached us so rapidly.

The FinTech Revolution

JS: It is often said that FinTech will change many things in our world. What is most intriguing is its impact upon banks. Will the new financial services provided by FinTech be competing against banks or supplementing their functions?

Niimura: As FinTech spreads, there will be many more venues for settling accounts outside the banking network. The transaction fees in those venues would be much cheaper. However, the megabanks should try to keep their existing clients even if they have to lower their fees, since fees for settling accounts are their principal source of revenue. The megabanks are now actively working on the application of FinTech, such as virtual currencies, to their business.

It is also true that after the current revised banking law in Japan related to FinTech passes the Diet, the restrictions on Japanese megabanks taking a stake in IT companies with FinTech technology will be loosened. They will be able to buy FinTech technology, while they have so far been engaged in developing technology through their own systems-engineering subsidiaries.

Each country has its own regulations on financial business, so Japanese banks are not particularly disadvantaged. The large Japanese banks are now working hard on the application of FinTech to their business through their special project teams.

JS: Well, then perhaps banks will not disappear but their transaction fee business will decline due to the rise of FinTech.

Niimura: Yes. In other words, in order to maintain their competitiveness, high transaction fees will not work. But they could maintain their profitability by increasing the number of transactions and curbing unit labor costs.

JS: Blockchain seems to be a key technology in FinTech. What does it look like?

Niimura: In order to access data in banks, we currently use a certification key. This is a way of confirming that the certification registered by the account holder is the same as the one preserved in the bank's data center. In the case of blockchain technology, the information is held in common among distributed computers as a block. All the transactions done by yourself are copied by the computers and thus this information can be accessed by those computers' certification of the access code.

This system keeps the information distributed rather than centralized. I believe that though blockchain technology still has technical questions to be resolved, it could have a good possibility of reducing the risks from computer hacking or other external threats. Another merit would be that this system would not need a preliminary system for disaster recovery to enable the whole system to be restored quickly after any malfunction caused by a disaster. So we would not need to invest money in such a preliminary system to minimize difficulties caused by a disaster and thus countermeasures to deal with such a temporary system malfunction would be changed.

Possible Demerits of FinTech

JS: Now I would like to ask you about the possible demerits of FinTech. There will be concerns about the leakage of client information, for example. How do you think we can avoid this and maintain the security of information?

Niimura: People in general may worry about the increased risk of leakage of information as a variety of data will be preserved among many venues in a diversified environment with blockchain technology. However, what would most likely happen in this case is that banks would maintain their current client information and business operations, and thus the scope of diffusion of information would be limited. The reputation of banks regarding security risks would be enormous and they would maintain their data in as secure an environment as possible. In addition, blockchain technology has an archival record of access and the data handled by it cannot be easily copied, and as such it is considered a secure technology.

JS: There must be new regulations to prevent the abusive use of virtual currencies, such as fund raising for terrorist groups or tax evasion. But these regulations, if excessive, could discourage less costly transactions and damage the advantages of FinTech. How do you think we could resolve this issue while maintaining the merits of FinTech?

Niimura: It would be very difficult, I guess. Regulations could retard the progress of FinTech. In Japan, as virtual currencies are beginning to be perceived as an effective currency, you must register your company with the authorities as a company engaged in the virtual currency business. The qualifications for becoming a registered company are gradually becoming more narrowly defined and the related regulations are now increasing. I think this is inevitable and we have to leave these policy decisions on regulations to each nation's government in accordance with their own economic situation. We would need to have such regulations to prevent infringements of public interest that could be caused by any loopholes from the lack of regulations on new technology. We would have to introduce regulations to eliminate concerns about security. However, I am rather optimistic about this. Regulations would certainly be a potential impediment to progress, but the technology will eventually prevail. I believe that eventually FinTech will spread globally, though it will take time to deal with such security concerns.

JS: If FinTech is spreading globally, then we would need international harmonization of rules, since different rules among the nations could prevent smooth business operations. Don't you think so?

Niimura: Yes, I do. I think such harmonization of rules could encourage global usage of FinTech.

JS: In order to achieve such international standardization of rules, we would need an international organization equipped with expertise on FinTech. Assuming that we cannot expect such knowledge and capacity in any international organization at this moment, I guess on the business side you would need to exchange information with other companies overseas and start thinking about the best security policy for your clients.

Niimura: At this moment, fortunately, we are happy to see many new business ideas emerging not only from the exchange of information among companies but also from our users as consumers. So I believe we can get a variety of ideas through such exchanges of information among clients as well as business firms. The greatest merit of FinTech may be that its users are very diversified.

JS: For expansive use of new technology, would it also be important to develop patents and standards?

Niimura: Yes. Patents are crucial to the development of new technologies and standards would be very important in expanding their usage. In electronic money, for example, Japan has its own standard while other nations have theirs, and that would discourage its expansive use globally.

FinTech as Source of Entrepreneurship

JS: The fusion of finance and IT, the basic concept of FinTech, could create a variety of business models. What kinds of new business do you think could be created?

Niimura: IT can be applied to any business, possibly more so than even finance. Blockchain technology is a technology for universal use and is connected with Big Data and the Internet of Things (IoT). What kind of business models could be created by this would depend on each nation's access to public information. For example, whether you can preserve data on health, such as personal histories of illness or medical records, outside hospitals could create different business opportunities.

As regulations on data preservation are modified and a greater free flow of information is achieved, there would be many more new business opportunities created among a wide range of sectors. With information from smartmeters or wearable computers or personal medical data, an insurance company could produce new insurance products. With more connections with business sectors other than financial, FinTech would have a wider use and thus enter into the area of Big Data.

JS: So the manufacturing industry would become more like the IT service industry?

Niimura: Yes. For example, a device maker, producing goods applicable to IoT, could collect a driver's information from a car. Telecommunication technology could be used to concentrate the collected information on a certain computer. And then, IT technology could be used for analyzing the collected and concentrated Big Data. If we can specify data on a certain individual, we could provide specific financial services like insurance products by taking advantage of his or her personal information. Through connecting the information obtained by the manufacturing industry with a wide range of other sectors, we would be able to create a new society providing each individual with extremely convenient services. The key to achieving it would be how to transform regulations, I believe.

JS: It is often said that we will need more decades to see the impact of innovation in general on our economy. But I guess in the domain of IT innovation, including Big Data or IoT, its impact upon the economy would be significantly quick. How rapidly do you think what we call the data driven innovation of the "Fourth Industrial Revolution" will affect our economy?

Niimura: We cannot stick to the same ideas or concepts for more than five years in this area. IT technology of five years ago would be considered obsolete. During the 1980s when Japan was in the midst of the "bubble economy", IT business was knowledge-intensive and the smart engineers working on it were in the spotlight. As all sectors were using IT, it became a labor-intensive business. During these past five years, IT business has undergone drastic innovation, and we are now able to create new marketing to stimulate consumer demand in accordance with social data now widely available on the Internet. Such an expansive spread of social data has never been possible before. Such a remarkably speedy change in the business landscape could raise concerns about how business regulations can keep pace with it.

JS: There is also an argument that our economic data would fail to grasp the full picture of such speedy innovation. What do you think of this?

Niimura: I am not an economist, so I am not quite sure about it. However, it is true that whenever we have had a financial crisis in recent years, a new business model supported by a new technology has emerged. In this regard, we will see the quickest progress in this area in the future as well. Above all, banks also have strength in FinTech, since they have their existing clients' data from their bank accounts and in Japan in particular each individual has a large amount of transactions linked to their accounts. In other words, the Japanese banks are focusing their business transactions on the domestic retail business. In the future, I guess they will expand their business to the retail sector in Asia and raise the quality of their services for clients by new technology. This is another important piece of the picture of the FinTech innovation.

JS: My last question is about Japanese culture. The Japanese are generally considered a risk-averse people rather than risk takers. I think we should take risks in order to take full advantage of FinTech and achieve new business models. Do you think we Japanese should change our attitude towards risk?

Niimura: Yes, this could be true. Many IT business people around the world are mostly happy to take risks to enjoy the fruits of a new technology. By contrast, Japanese IT business people including myself are a bit reluctant to do so. We should understand that risk-taking behavior could lead to outstanding business outcomes in this area. A deeper understanding of the possible benefits of FinTech would lead to empowering the Japanese economy, I believe. I think that megabanks' involvement in FinTech in Japan could mitigate such fears of risk and contribute greatly to the progress of FinTech. JS

Written with the cooperation of Naoko Sakai who is a freelance writer.