

LEARNING PRACTICAL FINTECH

FROM
SUCCESSFUL
COMPANIES

YOSHITAKA KITAO

WILEY

Learning Practical FinTech from Successful Companies

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Contents

<i>Preface</i>	vii
<i>List of Contributors</i>	ix
<i>Planning and Editing Staff of the SBI Group</i>	xi
CHAPTER 1 Internet Revolution and Evolution of FinTech	1
CHAPTER 2 Evolution of the SBI Group	11
CHAPTER 3 Background of the FinTech Revolution	27
CHAPTER 4 Breakthrough FinTech Companies	31
CHAPTER 5 Issues for Financial Institutions and the Legal System	133
<i>Afterword</i>	151
<i>About the Author and Editor</i>	155
<i>Index</i>	157

Preface

Because I would like this book to be different than introductory books written by academics and commentators in the field of finance, I have focused on corporate managers that struggle day and night to bring about a FinTech revolution.

I consider these people warriors trying to achieve this revolution. I decided to have these warriors (managers) describe their visions of the future and candidly write about what types of strategies and weapons (technologies) they will use to realize them. I am not an editor and have not given contributors to this book any instructions or expressed my opinion to them in advance.

I wrote Chapters 1 and 2 and decided to make these chapters extremely strategic and practical because I am a part of the SBI Group management. I did not have other contributors read my drafts because I did not want them to feel influenced by them.

Even when the drafts for all chapters were completed, I purposefully put off writing the preface because I waited with bated breath for the appearance of concrete evidence that indicates how close this revolution is to affecting all of us.

That evidence is the successful completion of a verification test conducted by a certain consortium. The results were announced on March 2, 2017, and were widely covered by various media outlets the following day. Efforts were led by the Japan Bank Consortium, of which 42 banks (61 banks as of the end of December 2017), more than one-third of Japanese banks, are members. This group successfully conducted a verification test of RC Cloud, a settlement platform that makes use of blockchain technology for low-value, high-frequency payments, and is working to commercialize the platform within this year.

This platform is a cloud-hosted next-generation settlement infrastructure developed by US-based Ripple Labs Inc., an SBI joint venture partner, and is the first such platform in the world. The platform makes it possible to make low-cost (about one-tenth of traditional costs) payments in near

real time. Work is currently underway to develop a payment app for mobile devices, and a true payment revolution is set to occur in 2018.

This coincides with the dramatic growth of the robo-advisory service offered by WealthNavi Inc. in partnership with SBI SECURITIES. Applications for accounts exceeded 37,000 in only a little more than a year since the service was launched at the end of January 2017, and customers have deposited more than 28.1 billion yen in assets.

These two developments definitively show that unless financial institutions are quick to introduce the latest technology and increase customer convenience, they will become less competitive and find it difficult to survive.

All financial institutions must be aware that the FinTech revolution will have an impact that vastly exceeds that of the Internet revolution. Our customers are also sure to abandon loyalty to traditional individual financial institutions and become extremely focused on increasing their own benefits.

There will probably be a steady outflow of customers from financial institutions that cannot quickly adapt, and the existing financial order will be destroyed within a short time. This will add to the financial revolution that is occurring simultaneously throughout the world.

The 17 managers who contributed to this book, including myself, have renewed our resolution to write our own future, and we are confident that the full realization of this revolution will be for the good of all people.

I would like to express my deep appreciation to all those who were involved in publishing this book.

Yoshitaka Kitao

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Internet Revolution and Evolution of FinTech

Paradigm Shift from FinTech 1.0

In 1999, some friends and I published a book called *Challenges of E-Finance* (Toyo Keizai Inc.). In the introduction, I wrote the following:

As Schumpeter's words clearly indicate, the new markets, new organizational forms of industries and other products that the Internet gives birth to will probably result in a process of creative destruction that occurs on a global scale, and at a speed that humanity has never seen before. This process will occur first in the finance industry, because that industry is well suited for the Internet.

The various companies in our financial group hope to create a stir that shifts Japan's distorted financial system to one that makes it possible to provide greater economic efficiency and convenience to investors and consumers of various financial services, by making use of the Internet's massive destructive power and reforming that distorted financial system. As history has shown, the process of creative destruction does not necessarily have a negative impact on the national economy, but probably has a positive impact when looked at from the long term, and comprehensively. We firmly believe this, and will take on the challenge of transforming the existing financial industry.

Over the years, I have repeatedly and assertively espoused an Internet revolution of this nature, and have intently pressed forward with efforts to achieve its realization. I will discuss the results of these efforts later, but there is probably wide agreement that this process of creative destruction has progressed with the speed and force that I envisioned when I first wrote the quoted passage.

Advent of FinTech 1.0

Since its founding in 1999, the SBI Group has built the world's first ecosystem for the Internet financial services industry, which includes services such as banking, securities, and insurance. I call this ecosystem *FinTech 1.0*. In Japan, the term *FinTech* started to be used frequently in 2015.

However, US focus had turned to FinTech about two or three years earlier, and it has gradually taken the spotlight. What many people mean by the term *FinTech* is not simply introducing online versions of traditional financial services. Instead, the term applies to the provision of new solutions for the full range of financial services. US-based PayPal Holdings Inc. (among others) took the lead in this movement. Founded in 1998, PayPal provides a payment service that makes use of email accounts and other Internet tools, and, as of October 2017, the number of PayPal subscribers had reached 218 million. If users register their credit card information with PayPal in advance, they can pay for their online shopping at a low cost, and without providing credit card data to online stores, by simply entering their PayPal ID and password and processing their purchases through this platform.

PayPal has brought a welcome breath of fresh air to traditional payment systems. Following PayPal, Apple announced Apple Pay in 2014: a payment system that makes use of the iPhone. Alipay, the payment service that China-based Alibaba Group launched in 2004, is the largest online payment service in the world and boasts at least 500 million users.

Spurred on by PayPal's success, non-financial startup companies—not only payment systems, but also loans, asset management, fund-raising, and remittances across various financial fields globally—have emerged. These individual technologies developed by both startup and established companies are now being applied in the field of finance, and various component technologies owned by different startup companies are being combined and used, primarily by financial institutions that provide full lines of financial products.

FinTech 1.5 : The Result of New Technology

These technologies have fostered development and deployment of efficient and effective financial products in various financial fields. Component technologies include artificial intelligence (AI), big data applications, the evolution of the Internet of Things (IoT, which connects the physical world to the Internet), and robotics. The Japanese financial services industry began using these technologies—individually and in combination—about 2010. The introduction of these technologies rapidly evolved precisely when a

Kondratieff wave (economic cycle that lasts 50–60 years caused by technological innovation) emerged, and major financial institutions began broad-scale deployment in 2012–2013. I refer to this trend, which has attracted attention since 2012–2013, as *FinTech 1.5* because it is basically a more evolved form of FinTech 1.0 (Figure 1.1).

The world that I call *FinTech 2.0* resides in a different dimension than that of the worlds of FinTech 1.0 or FinTech 1.5. The existence of the Internet is indispensable to both FinTech 1.0 and FinTech 1.5, and in the world of FinTech 1.0, the World Wide Web, made it possible for individuals to freely exchange various types of data on a larger scale than ever before in human history.

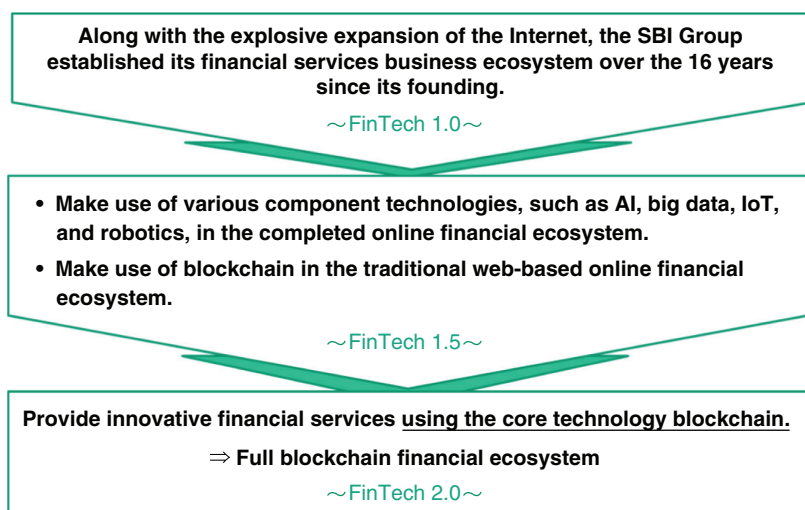


FIGURE 1.1 Evolution of FinTech

Source: SBI Holdings.

In recent years, a vast array of web-based applications (apps) have been developed, and it can be argued that the combination of their commercial availability and greater use of mobile phones has enabled the worlds of FinTech 1.0 and FinTech 1.5 to develop and flourish. However, with respect to financial services, it can be argued—particularly in Japan—that we now live in the world of FinTech 1.0, a composite of online financial services that developed between 1995 and 2000, and the more-evolved system developed primarily by startup companies. For Japanese financial institutions, I would observe that their basic business has not evolved since the previous IT era.

Blockchain-based FinTech 2.0

The core technology of FinTech 2.0 is blockchain technology, and unlike FinTech 1.0 and 1.5, FinTech 2.0 does not necessarily rely entirely on the web. The advent of the Internet-based web has made it possible to exchange information throughout the world, but blockchain technology makes a global value exchange over the Internet possible. Both can exist, but they are of different natures and must be treated accordingly (Figure 1.2).

I differentiate among FinTech 1.0, 1.5, and 2.0 because if they are lumped together under the heading FinTech, there is the danger that the innovation potential and its prospects for transforming society may be underestimated. If so, it could hinder the development of blockchain technology in Japan. Since Satoshi Nakamoto published his paper on the cryptocurrency Bitcoin in 2009,¹ blockchain technology has drawn the spotlight as the basic technology underlying Bitcoin.

Although this is only natural considering the growth of blockchain, the focus of the concept has been by and large limited to currency-related functions, as a medium of exchange and store of value. Since about 2012–2013, however, there have been major improvements to not only cryptocurrency frameworks but also business mechanisms (not simply those related to finance), and there has been greater awareness and expectation for the broad application of blockchain, including in the field of public administration.

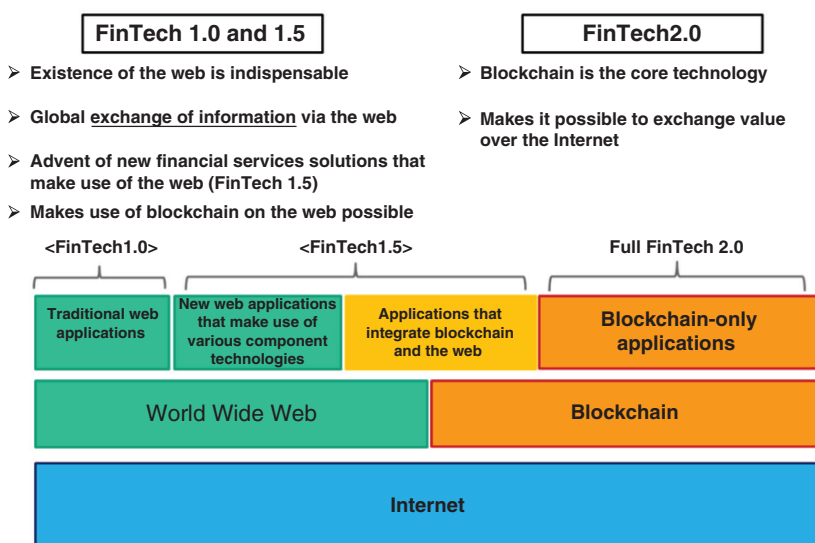


FIGURE 1.2 The World of FinTech 2.0

Source: SBI Holdings.

¹ <https://Bitcoin.org/Bitcoin.pdf>