

New Initiative Launched by Establishment of Financial Innovation Laboratory in North America

Global Deployment of Financial Innovations Based on Digitalization and FinTech

With digital technology rapidly becoming integral to our way of life, attention is being focused on FinTech for providing a new value through the combination of financial services and IT. Recognizing the trends of digitalization and FinTech, Hitachi is picking up the pace of its work on digital financial innovation with the aim of working with customers to create innovative solutions. To this end, Hitachi has established the Financial Innovation Laboratory at the Silicon Valley site of its Global Center for Social Innovation – North America to operate as a research and development organization for engaging in collaborative creation with customers, particularly in North America. Working with a wide variety of partners, this new facility will adopt a global focus as it targets innovation in the finance business.

Taiki Sakata

General Manager, Business Planning,
Business Planning Department,
Financial Information Systems Sales Management Division,
Financial Institutions Business Unit, Hitachi, Ltd.

Itaru Nishizawa

Project Manager, Collaborative Creation with Customers,
Global Center for Social Innovation – Tokyo,
Research & Development Group, Hitachi, Ltd.

David Pinski

Chief Strategist, Financial Innovation Laboratory,
Global Center for Social Innovation – North America,
Hitachi America, Ltd.

Targeting Financial Innovation Based on Digital Technology

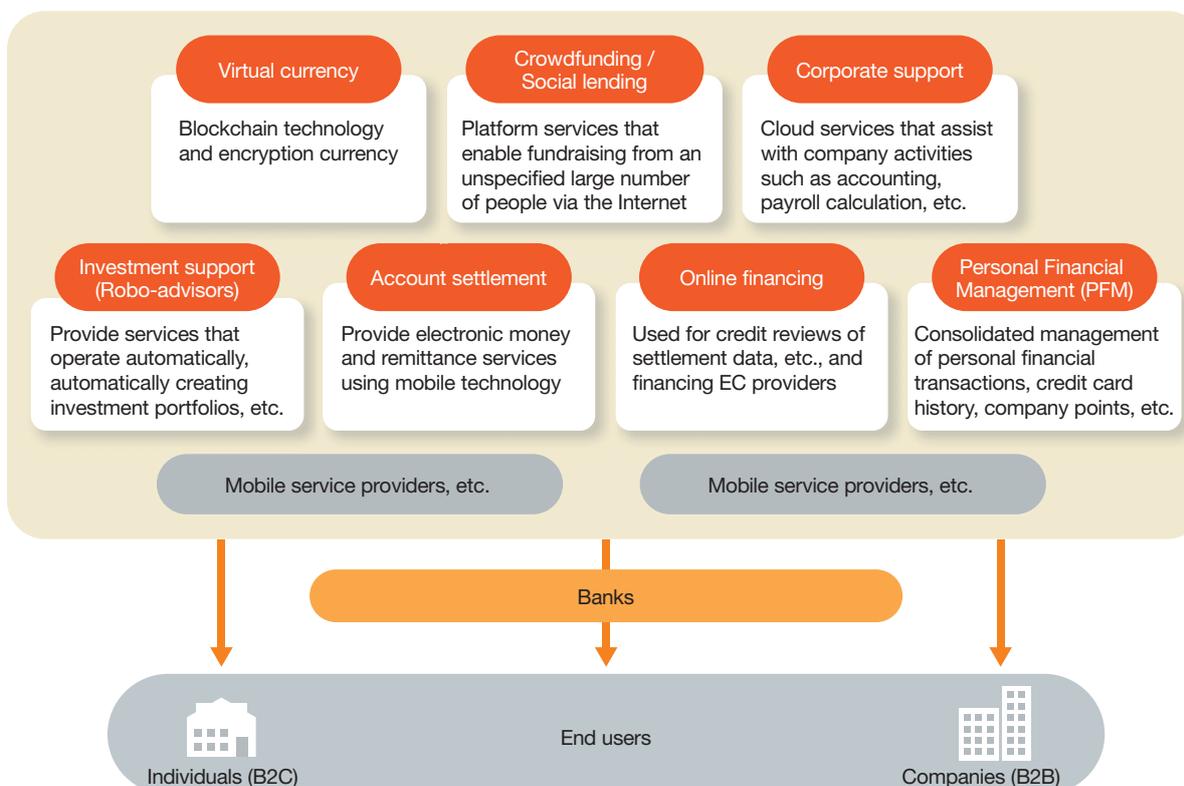
What is Hitachi's stance toward new trends such as FinTech in the financial industry?

Sakata This link between finance and IT is nothing new, and Hitachi has a record of supplying comprehensive system integration to financial institutions in Japan, extending from the core hardware to business applications and various solutions. We are also aware of the increasing level of activity as existing financial institutions respond to the transformation of their industry, with major changes in the competitive

environment of the finance sector brought about by the emergence of FinTech companies that supply new financial services using digital technologies like smartphones and the Internet of Things (IoT). I believe that developing and rolling out new service models as quickly as possible is crucial to supporting customers who are facing changes. Hitachi is being called on to create a new value with a greater focus that in the past on open innovation oriented, including by working with FinTech companies and adopting open source software (OSS). Amid all this change, we have launched initiatives that seek to identify trends in digital technology and FinTech, and develop innovative solutions in collaboration with customers.

Pinski As part of this, we established our Financial

Key areas of FinTech



EC: electronic commerce PFM: personal financial management B2C: business to consumer B2B: business to business

Innovation Laboratory at the Global Center for Social Innovation – North America in April 2016. Taking advantage of being located in North America, home to many FinTech companies, we are working with customers and other partners to research the latest trends in the finance sector and develop solution models that use such technologies as the blockchain or big data analytics.

Hitachi has extensive experience in the implementation of financial systems and is familiar with the latest digital technology. In addition to promoting Hitachi's strength and presence throughout the world, the laboratory is also seeking to use digital technology to bring about financial innovations by applying the latest technologies to as many customer needs as possible.

Nishizawa While FinTech is redefining financial services from a user's perspective, utilizing open infrastructure and techniques for leveraging data developed outside the finance sector, I believe it is taking different directions in different parts of the world. The current focus is on providing better financial services for individuals, but overseas it will also likely include the provision of things like financial services for the unbanked. Our centers for social innovation are research and development organizations at which developing a common understanding of customer challenges and working with them on innovative solutions play a central role. With the establishment of the Financial Innovation Laboratory at our North American center, our aim is to support customers in the finance industry, both in Japan

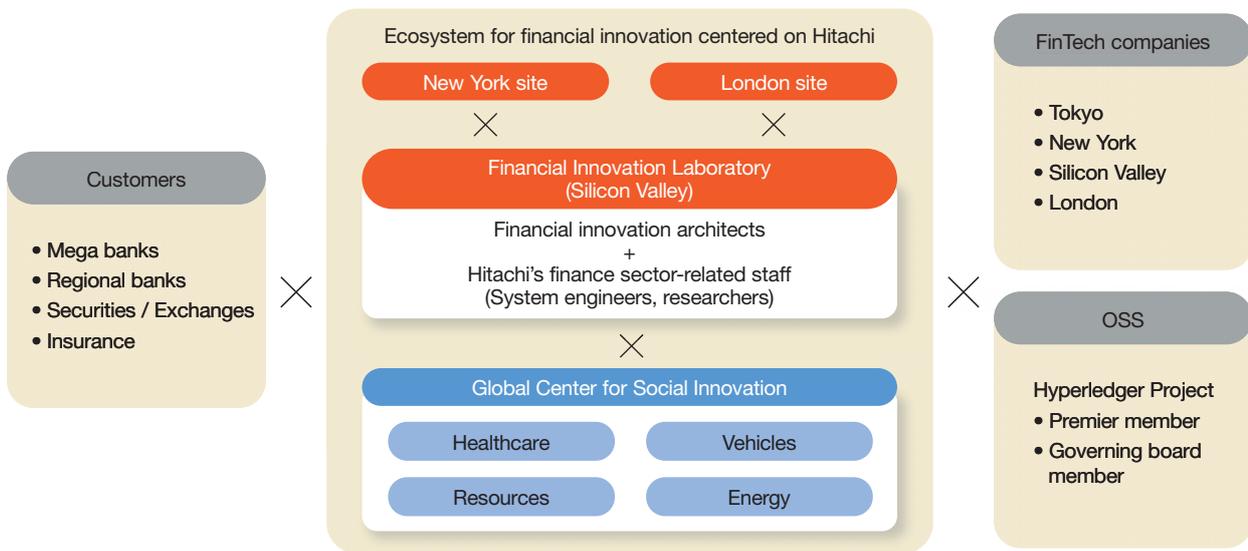


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Concepts behind financial innovation at Hitachi



and elsewhere, as they take on new challenges by facilitating collaborative creation with them.

Wider Application of Blockchain, a Promising New Technology

Which technologies are you looking at in relation to FinTech?

Nishizawa One such technology is the blockchain. As well as being on the board of the Hyperledger* Project that is jointly developing global de facto standard technologies, we are also working on research and

development to acquire a competitive advantage in areas like performance and security. This includes the joint development with the Bank of Tokyo-Mitsubishi UFJ of a system based on the blockchain for transactions such as issuing electronic checks or making transfers. Proof of concept testing is now underway in Singapore. This trial will facilitate the development of applied solutions by identifying the issues associated with the practical use of the blockchain as part of the financial infrastructure.

We have also embarked on an initiative that utilizes the blockchain as an IoT platform. We are looking into new applications that include combining collected data with technologies like big data analytics and artificial intelligence (AI).

* See "Trademarks" on page 162.

Sakata The mechanism of the blockchain, whereby trust and transparency are maintained by holding distributed copies of a shared ledger, means that it can be used to build highly flexible and low-cost platforms that do not require management to be consolidated in a centralized system. There is scope for using these platforms in a wide variety of industries, not only finance.

Pinski We, too, have started investigating solution concepts with highly receptive customers interested in the blockchain application. The sharing of datasets as blockchains is expected to bring changes to the markets by, for example, enabling faster inter-corporate settlement in proprietary trading or reinsurance markets. Our corporate customers have a high level of expectation for the possibilities this opens up.

Speaking of the IoT, a model already exists in predictive maintenance or fleet management systems for industrial equipment, vehicles, and similar. This can potentially be utilized for asset-backed lending, new types of insurance, or to create unprecedented financial services.

Sakata AI is another technology seen as having great potential. Along with helping boost productivity in the financial industry by performing work in place of people, it also has the potential to uncover new facts, rules, or other financial insights in diverse data. We are looking at various ways it can be put to use.

New Ecosystem for Financial Innovation

What are you planning for the future to achieve digital financial innovation?

Nishizawa In tandem with Sumitomo Mitsui Banking Corporation and Vietnam Post, Hitachi has participated in a study into a cashless payment service that utilizes the network of post offices in Vietnam. We hope to

contribute to providing better social infrastructure in Vietnam by incorporating the results of the study into an actual service in the future. It is important to develop financial services that will function as new infrastructure for society, treating the requirements of social infrastructure as a starting point and with a view to the future. This involves taking existing Hitachi technologies that have been proven in Japan and utilizing them in other countries to achieve financial innovation. We hope to increase the number of such examples in the future and to foster diverse social innovations from the finance sector through the skillful combination of innovative new technologies.

Sakata Rather than new technology being needed to achieve innovation, the keys are ideas and frameworks that make good use of existing technologies. To this end, Hitachi has been actively working on the collaborative creation of solutions with customers, including use of our IoT platform, Lumada. Moreover, by building up a portfolio of successful use cases and deploying them across different applications, we will provide global support for the implementation of financial services that deliver value to both customers and users.

Pinski At our laboratory, we are endeavoring to develop new ideas that transcend the boundaries of finance by working more closely with researchers in fields like big data analytics and the IoT, and with staff from other innovation laboratories for energy, transportation, and healthcare that are also located at the Global Center for Social Innovation – North America. In addition to collaborative creation with customers, we are also planning joint research with universities and other research institutions in North America. Through these activities, we aim to become an innovation leader in the finance sector by creating a new ecosystem for financial innovation.