JETRO Australia

SERVICES X TECHNOLOGY TRENDS IN JAPAN

Like anywhere else in the world, the scope for integration of technology into the service industry is wide and deep in Japan. Technologies are constantly being integrated into the existing industries creating new services, business models and opportunities for innovative startups both domestic and international.

To accelerate innovation and technologies, Prime Minister Suga has instructed his Government to prioritise preparations to establish a government agency to lead the efforts for digitalizing society. This is in addition to the existing measures put in place under the Abe Government, including the "Future Investment Strategy", "Integrated Innovation Strategy" and "New Industrial Structure Vision" amongst others.

Under Prime Minister Abe the relevant ministries have already rolled out the measures to support market growth for each field. The examples include the establishment of the "Data Health Reform Promotion Headquarters" by the Ministry of Health, Labour and Welfare; and "FinTech Vision" proposed by the Ministry of Economy, Trade and Industry.

In parallel, COVID-19 has increased the urgency for Japanese corporations to embrace digital transformation and find tech solutions to solve problems created by disruption due to the pandemic.

There are an increasing number of cases of investment in tech companies by VC funds, including those by made by foreign and foreign companies.

On the right are the representative trends in Industry X Digital Technology, what is called "X-Tech (cross-tech)".

Representative X-Tech[1]	Definitions	Degree of Attention in Japan[2]
FinTech	FinTech is an abbreviation of "Finance x Technology", which refers to innovative financial services utilizing ICT. The government is making efforts to make it popular, for instance through incorporating FinTech into one of the five strategic fields in the "Future Investment Strategy 2017".	
HealthTech	Healthcare Tech is an abbreviation of "Healthcare x Technology", which refers to the trend of incorporating ICT into the medical field. In this report, Healthcare Tech includes Biotech, which aims at integrating ICT into biology and biotechnology along with MedTech to offer products and services through integrating ICT into medical equipment based on electronic control technology.	
AdTech	AdTech is an abbreviation of "Advertisement (ad) x Technology", which means the Internet advertisement delivery technology and advertising distribution technology. AdTech is used also for display advertising, listing advertising and search engine marketing (SEM).	
EdTech	EdTech is an abbreviation of "Education x Technology". The demonstration towards the development of the "Next- Generation School ICT Environment" is also based on the "EdTech Utilization Model" that utilizes advanced technologies, such as AI, to solve problems at schools.	
HRTech	HRTech is an abbreviation of "Human Resource x Technology", which refers to conducting personnel-related operations, such as recruitment, development, evaluation and labor management, utilizing IT. AI interviewer has also been developed.	
InsurTech	InsurTech is an abbreviation of "Insurance x Technology". This refers to utilization of technology for insurance underwriting, insurance premium management, insurance payout, insurance product sales, etc., which are implemented by insurance companies, aiming at improving work efficiency/ profitability and creating new services.	

Source: Prepared based on Hitachi, Ltd. "Trends of Digital Innovation" X - Tech, Nikkei Business "Do You Understand the X-Tech Trends Correctly?", Google Trend, etc. 1 The four fields covered in this report are shown in dark colour. 2 Degree of Attention is calculated using "Google Trend".

Major strategies/visions by the Japanese Government related to Innovation and Technology

POLICIES	ANNOUNCED	OVERVIEW
Future Investment Strategy 2018 (Prime Minister's Office) https://www.kantei.go.jp/jp/singi/keizaisaisei/pdf/miraitousi2018_zentai.pdf (JPN only)	June 2018	• The creation of a vision of "Society 5.0" is for improved lives for people, a stronger economy, resolution of various issues by utilising AI, robots, IoT etc. and structural reform in Japan. • The priority areas include establishment of the next-generation healthcare system, promotion of cashless payments, etc.
Integrated Innovation Strategy (Cabinet Office) https://www8.cao.go.jp/cstp/tougosenryaku/tougo_honbun.pdf (JPN only)	June 2018	• Integrated various policies on science and technology into one strategy in order to realize "the country best suited for innovation in the world" and to become the country leading the world in presenting solution models for the problems faced by each country. • The main areas that need specific emphasis are: (1) AI technology; (2) biotechnology; (3) environmental energies; (4) safety and security; and (5) agriculture.
New Industrial Structure Vision (METI) http://www.meti.go.jp/press/2017/05/20170530007/20170530007-2.pdf (JPN only)	May 2017	• The vision to realize "Society 5.0" and "Connected Industries", which aims to connect diverse people, organizations, machinery, technologies and the country and to solve social problems. • The four strategic areas are: "to move"; "to produce and to obtain"; "to maintain health and to be active for the lifetime"; and "to live (including FinTech)".

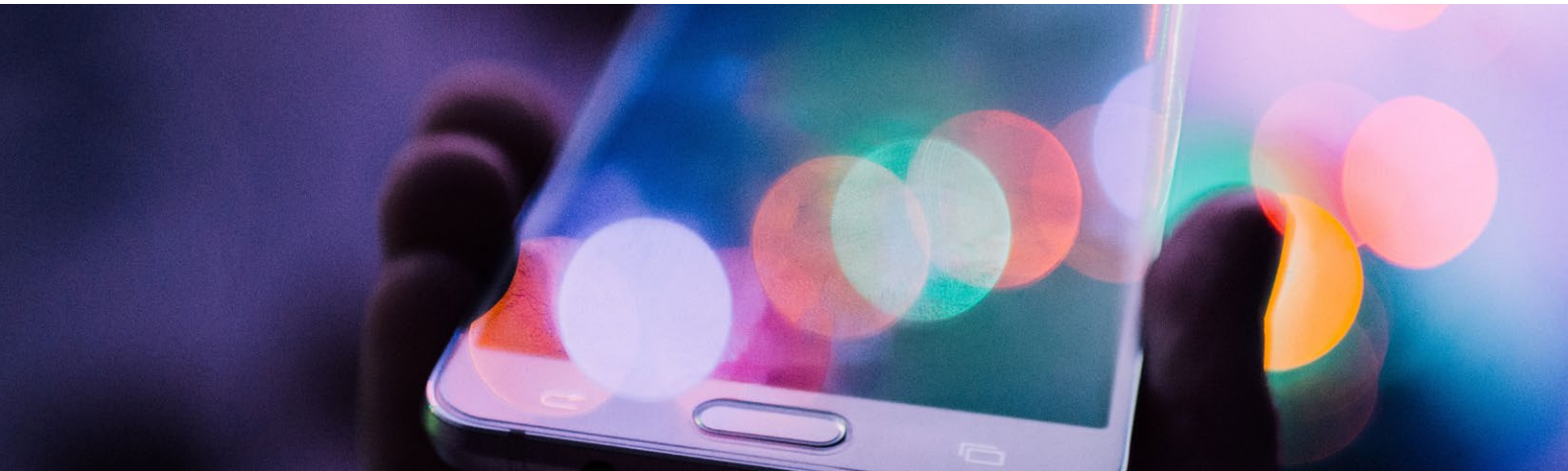
Source: Website of each ministry/office

Government activities related to each Service X Tech Industry

Japanese ministries are taking various measures in each individual area to support market expansion. The table below gives an indication of the spread of activity.

SERVICE X TECH	POLICIES	OVERVIEW
HealthTech	Establishment of the Data Health Reform Promotion Headquarters (Ministry of Health, Labour and Welfare)	• Established as an organization to conduct cross-sectional review within the Ministry of Health, Labor and Welfare in order to make full use of the ICT infrastructure from FY2020 organically linking the fields of health, medical care and nursing care. • ICT infrastructure, such as healthcare data platform, is expected to be opened to the private sector.
FinTech/InsurTech	FinTech Vision (METI)	• Described the current state of FinTech; the ideal state of FinTech society to aim for; the issues to realize such a society; and policy proposal. • Proposed three themes as the basic direction: "preparation of FinTech's prerequisites"; "facilitation of "money" flow"; and "encouragement of the use of FinTech by SMEs etc".
EdTech	Establishment of the Project Team for Education Reform Promotion Utilizing EdTech (MEXT)	• Established to identify issues (barriers) related to quality improvement of education using EdTech and to arrange countermeasures to solve the issues. • Actively cooperate with the METI for instance through participating as an observer from the MEXT in the "Future Classroom" and EdTech Study Group", which are organized by the METI.
	Establishment of "Future Classroom" and the EdTech Study Group (METI)	• Established for the purpose of discussing: (1) the form of the "Future Classroom (Place for Learning)" necessary for each educational stage - before preschool, primary, secondary, higher and recurrent education; (2) ideal status ad development of necessary EdTech; (3) introduction/dissemination at schools and the issues related to overseas market development. • Demonstrated a new education/human resource development service utilizing EdTech based on the discussion at this study group.

Source: Website of each ministry/office



Tech trends in specific industries

HealthTech

The Health Tech market in Japan is expected to grow to more than 3 trillion yen in 2030.

Representative examples of HealthTech include medical image diagnosis using AI, remote and online clinical service.

The features of the HealthTech market environment include: (1) rapid aging of society; (2) universal healthcare insurance system; (3) legal reform for medical care using ICT equipment; (4) deregulation on medical care using ICT equipment; and (5) penetration of foreign products into the market.

Environment for HealthTech in Japan

Rapid Aging of Society	• In 2018, the elderly population (over 65 years old) reached 35.57 million people, which accounts for 28.1% of the total population. In 2040, it is projected that the elderly population will rise to 39.21 million people accounting for 35.3% of the entire population. This trend is expected to rapidly increase the number of people requiring for healthcare. • There is a shortage of manpower to meet the rapidly growing demand of elderly healthcare.
Universal Healthcare Insurance System	• The market is large due to equal access to medical treatment for every citizen. • It is easy to accumulate medical-related data.
Deregulation on Medical Care Using ICT Equipment	• The notice issued by the Ministry of Health, Labour and Welfare in July 2017 clarified that it is legal to conduct only remote medical examinations using videophone, e-mail, SNS, etc. without performing face-to-face examinations.
Penetration of Foreign Products into the Market	• In the medical equipment market, foreign imports have a market share of 45% creating a low resistance to foreign products in this field.

Source: Swiss Business Hub Japan, Healthcare Tech in Japan; Website of the Statistics Bureau of the Ministry of Internal Affairs and Communications; Nikkei Digital Health, December 11, 2017; Tech Crunch, July 20, 2017)

FinTech

The FinTech market, including InsurTech, (Insurance tech) in Japan is projected to expand to 1.859 trillion yen in FY2021.

Considerable growth in the FinTech market is expected in the next few years and Tokyo is anticipating foreign FinTechs to reinvigorate its financial sector.

The Tokyo Metropolitan Government (TMG) is promoting initiatives to stimulate the financial industry in cooperation with the national government and private businesses. The vision for "Global Financial City: Tokyo" was set in November 2017 under the leadership of Governor Koike and the Tokyo Metropolitan Government.[3]

Representative examples of FinTech include smart payments such as electronic payment, asset management using AI, personal finance apps etc.

The features of the FinTech market environment include: (1) high cash payment rate; (2) API connection with financial institutions; (3) regulatory sandbox; and (4) formation of industrial clusters.

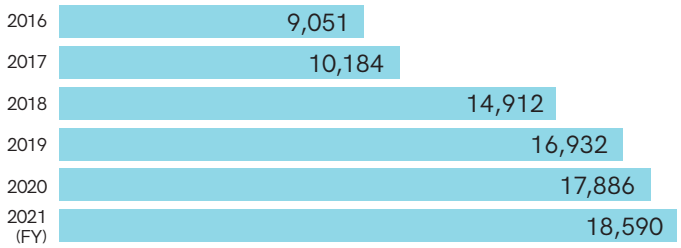
3 Source: TMG https://www.metro.tokyo.lg.jp/english/topics/2019/1015_01.html

Environment for FinTech in Japan

Large Potential for Cashless Payment	• While the cashless payment ratio in Japan remained at about 20% in 2016, the "Future Investment Strategy 2018" set a goal of doubling the ratio up to 40% by 2027.
API Connection with Financial Institutions	• The revision of the Banking Act in 2017 allowed for API connection with banks and the framework was developed enabling banks to provide account information and transaction functions to external apps.
Regulatory Sandbox	• The project-based regulatory sandbox system was launched in 2018 enabling demonstration of innovative technologies and services that conflict with the current regulations. The examples of innovative technologies include blockchain etc., which are important for FinTech.
Formation of Industrial Clusters	• New or renovated FinTech industrial bases have been opening one after another in Tokyo, such as "FINOLAB" in Otemachi and "FinGATE KAYABA" in Kabukicho. • Meet-ups are actively held at the above facilities and other places in Tokyo, and progress is being made in promoting partnerships with overseas FinTech bases.

Source: Swiss Business Hub Japan, FinTech in Japan; Materials of the Bank of Japan; Prime Minister's Office, Future Investment Strategy 2018; Websites of METI and FSA; Yano Research Institute, Press Release of *Current Status and Outlook of the FinTech Market 2018.*

Trends of Investment in the FinTech Companies in Japan (in 100 millions of yen)[1]



Source: Yano Research Institute, Press Release of *Current Status and Outlook of the FinTech Market 2018.* Sales of FinTech Startups. Note: include the [1]InsurTech Market

InsurTech

The InsurTech market in Japan is expected to grow to 179 billion in FY2021.

Representative examples of InsurTech: Prevention of insurance fraud by data analysis, cloud platform for insurance policy storage, etc.

Environment for InsurTech in Japan

Streamlining of Operation and Precedence of the Advanced Areas	• The current driving forces in the InsurTech Market are streamlining/ sophisticated solutions of insurance payment business, underwriting assessment, etc. utilizing AI and RPA (robotic process automation).
Opening of Public Data	• The future direction toward opening various data possessed by national and local governments was indicated in the "Declaration to Be The World's Most Advanced IT Nation & the Basic Plan for the Advancement of Public and Private Sector Data", which was issued by the Japanese government (drafted in May 2017 and decided by the Cabinet in June 2018 after revision). Realization of such a direction is expected to create new opportunities in the InsurTech market.
Regulatory Sandbox	• The project-based regulatory sandbox system was launched in 2018 enabling demonstration of innovative technologies and services that conflict with the current regulations. Similar to the FinTech, the examples of innovative technologies include blockchains, etc., which is important for InsurTech.

Source: Yano Research Institute, Press Release of *Current Status and Outlook of the InsurTech Market for Life Insurance Companies 2018*; Prime Minister's Office, *Declaration to Be The World's Most Advanced IT Nation & the Basic Plan for the Advancement of Public and Private Sector Data*; METI website

EdTech

The EdTech market in Japan is expected to reach a scale exceeding 300 billion yen in FY2023.

Japan's traditional one-way lecture style has offered little incentive to date for many teachers to learn to use information and communication technology tools effectively.

However, COVID-19 and the temporary closure of schools in Japan in February 2020, highlighted the need for better integration of tech throughout the education system to accelerate teaching and learning in Japan.

Examples of EdTech include Apps for individual learning record visualization, education matching service, IT/ programming education services for high school students, and online collaboration tools for students.

The features of the EdTech market environment include: (1) shortage of IT infrastructure at schools; and (2) workstyle reform.

Environment for Edtech in Japan

Increasing Demand of IT Infrastructure/ Technology at Schools	• Only about 1% of municipalities provide one information terminal per person. More than 80% of the municipalities have less than 10 tablet PCs per elementary/junior high school, and less than 80% of the municipalities have ten tablet PCs per high school. • Programming education will be compulsory at elementary/junior and senior high schools according to the revised educational guidelines to be enforced gradually from FY2020. • The budgetary request related to information technology at schools made by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) was expanded to 1.5 billion yen in FY2018 from 667 million yen in the previous year.
Workstyle Reform	• In anticipation of labor shortage in the future, labor productivity is attracting attention making in-house education more important. • An increasing number of companies are working on the correction of long working hours. An increase in leisure time, however, is considered to expand the number of people starting new learning activities, coupled with lifting of the ban on side business.

Source: Nomura Research Institute, *Current Status and Challenges of the EdTech Market*; Materials of the MEXT; Fledge, February 16, 2018

Below is indicative of key players in the sector, however this is changing rapidly with new entrants.

LEARNING MANAGEMENT

B to C
Studyplus
Study Timer
THINKERS

B to B
Studyplus for School
Classi
Quipper (UK)
e-tr
Testplus
Feelnote
mikan for School
Jukencompass

LMS
NetLearning
Digital Knowledge
Manabipocket
Manabeat

Digital Study Materials
eduplus+
SuRaLa
FLENS

AI Study Materials
Qubena
atama+

LEARNING WITH VIDEO

B to C
Study Sapuri
Gakken Prime Zemi
STUDY TOWN
Try IT
Asteria
Aoi Zemi
Manabi Aid

B to B
Study Sapuri
Gakken Prime Zemi
Yozemi Sateline
Wingnet
Toshin
Kawaijuku Manavis
Veritas Academy
BroadbandYobiko
@Will
Manabi Aid

Online School
N High School
N Yobiko
School Z

MOOC
Udemy (US)
Coursera (US)
JMOOC
Schoo

CLASS SUPPORT

Loilo Note School
school Takt
StudyLinkZ
ClearS
Link
VQS Collabo
SENSEI NOTE
MOVARI
Kocri
Kotoba Canpus
MetaMoji ClassRoom
Edmodo

School Business Support
Comiru
Hikari Cloud Smart Study
Jukumane
anesta2
BIT CAMPUS
COMP
Mitizane
reco

C to C
StreetAcademy
POLYGLOTS Teacher
Clear
manabo

ONLINE ENGLISH CONVERSATION

RareJob
Bizmates
Weblio English
Langrich
Best Teacher
hanaso
DMM English
kimini
vipabc (Taiwan)
ClassDo (Singapore)
OLECO

AI English Conversation
TerraTalk
Study Sapuri ENGLISH
SpeakBuddy
AI English

Study App
Eipontan
HiNative
Kikoeigo
mikan
Smart Education
Maname

PROGRAMMING EDUCATION

CodeCamp
Dot Install
TECHACADEMY
Life is Tech!
Code CHRYSALIS
TECH CAMP
Progate
CA Tech Kids
N Yobiko Programming

Robot Programming
Robo Done
Artec Edison Academy
crefus
LITALICO wonder
Robot Academy
Robot Kyoshitsu

Services X Technology trends in Japan are changing rapidly. This is a summary of information sourced through JETRO reports. If you are interested in investing or commencing business in Japan in this sector seek the latest updates on the trends and regulations through JETRO and original sources.

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