

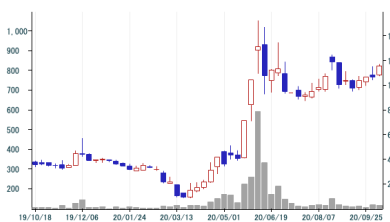
BASIC



Key Indicators

Share price (10/15)	798
YH (20/6/2)	1,056
YL (20/3/23)	156
10YH (14/8/26)	1,421
10YL (11/1/21)	26.7
Shrs out. (mn, shrs)	38.163
Mkt cap (¥bn)	30.455
EV (¥bn)	23.028
Current ratio	145%
ADVT (22days avg, ¥mn)	530
Shr eqty ratio (3/31)	46.4%
FY3/21 P/E (CE)	3,045.40x
FY3/20 P/B (act)	10.00x
FY3/20 ROE (act)	-25.2%
FY3/21 DY (CE)	0.0%

Share Price Chart 52 weeks



SESSA Research Team
research@sessapartners.co.jp



Pioneering New Life Science by Optimizing AI with Natural Language

Executive Summary

FRONTEO leverages a proprietary natural language processing (NLP) AI engine to research and develop solutions used in legal, financial, manufacturing, and medical fields. It currently focuses on Life Science AI as a new driver of business expansion, making it a unique name in Japan's AI landscape.

Established in August 2003, FRONTEO has continued to deliver growth as a leading legal tech company. In the process of developing legal tech, it developed proprietary AI technology. Since the mid-2010s, it applied this technology beyond legal tech, such as medical care, finance, manufacturing, and IP. In recent years, it has particularly focused on applying its technology to life science, an area expected to grow drastically. Using its AI x NLP expertise, further development is likely to be seen on this front, including in diagnostic support and drug discovery. Recently, FRONTEO has used its technology to analyze an effective mechanism for selecting a COVID-19 drug candidate, drawing significant attention to its unique approach employing its proprietary natural language AI.

Points to bear in mind regarding earnings: (1) Revenue in Legal Tech comes largely from one-time fees, exposing it to heavy swings depending on progress in contract closure; (2) A high fixed expense ratio weighs heavily on profits when revenues fall; and (3) Aggressive growth investments have resulted in hefty software depreciation and goodwill amortization, which have dragged down profits. But repeated investments to achieve robust growth have helped realize the robust growth to present, and management's proactive stance merits appreciation.

Four key questions on FRONTEO

1. Will the ROI of active investments to develop AI medical devices in the life science domain satisfy investors? The feasibility and earnings potential of an AI diagnostic system are unclear, given the lack of precedents. Many other startups are applying AI to life science, including drug discovery. What are FRONTEO's competitive advantages, and will it continue to be able to win contracts from prominent pharmaceutical companies?
2. FRONTEO started out in legal tech but has since honed its competitive advantage by applying AI x NLP to other fields. Management targets JPY30.0bn in revenue, driven by growth in domains other than legal tech. However, achieving this goal will be faced with many challenges such as additional investment in personnel. What are the concrete steps by which FRONTEO intends to meet this target?
3. COVID-19's spread boosted expectations for growth in FRONTEO's Life Science AI business and lifted the share price. The share price would be inexplicable on a P/E basis, but it doesn't look exorbitantly high compared to peers on a P/B basis. Going forward, will FRONTEO be able to deliver earnings that meet the expectations baked into its share price?

This report was prepared by Sessa Partners on behalf of FRONTEO, Inc. Please refer to the legal disclaimer at the end for details.



4. The mainstay Legal Tech AI business accounts for slightly less than 90% of revenue, meaning the business' cash flows are crucial. FRONTEO enjoys a first-mover advantage in this field in Asia, but past earnings have been relatively volatile. Earnings have recently been improving, chiefly due to restructuring in the US and further adoption of AI. Going forward, will FRONTEO be able to shore up its investments in new businesses by generating stable cashflows?

Table of Contents

Executive Summary	1
Key Questions	
1 Earnings Trends	3
2 Business Overview	3
3 Key Topics: Life Science AI Business Strategy	
Overview of Life Science AI Business	4
4 Financial Results	
Q1 FY3/21 Results	9
5 Future Outlook	
Full-Year FY3/21 Forecast	10
Medium-Term Roadmap	10
6 Share Price Information	
Share Price	11
Our View on the Share Price	12
Comparison of Six AI/Data Analysis Companies Based on Share Price, Financial Data	14
Major Shareholders	16
Breakdown by Shareholder Type	16
7 Financial Statements	
Income Statement	17
Balance Sheet	18
Supplementary Data	19
Statement of Cash Flows	20
8 Company Overview	
History	21
Group Overview	23
Services and Features	23
Legal Tech AI Business	23
AI Solution Business	25

Note: "The company" refers to FRONTEO. Calculations in figures may not match due to rounding.

① FRONTEO: Earnings Trends (Consolidated)

JPY mn	Net sales	YoY (%)	Oper. Profit	YoY (%)	Ord. Profit	YoY (%)	Profit ATOP	YoY (%)	EPS (JPY)	DPS (JPY)
FY3/2017	11,207	6.2	-1,206	-2.9	-1,245	—	-948	—	26.07	0.00
FY3/2018	12,217	9.0	177	—	-16	—	-828	—	-21.79	0.00
FY3/2019	11,262	-7.8	244	37.5	203	—	52	—	1.37	3.00
FY3/2020	10,470	-7.0	-844	—	-992	—	-929	—	-24.37	0.00
FY3/2021 (E)	11,000	5.1	200	—	97	—	10	—	0.26	0.00
FY3/2020 1Q	2,583	-6.3	-444	—	-479	—	-444	—	-11.65	0.00
FY3/2021 1Q	2,933	13.6	40	—	41	—	28	—	0.74	0.00

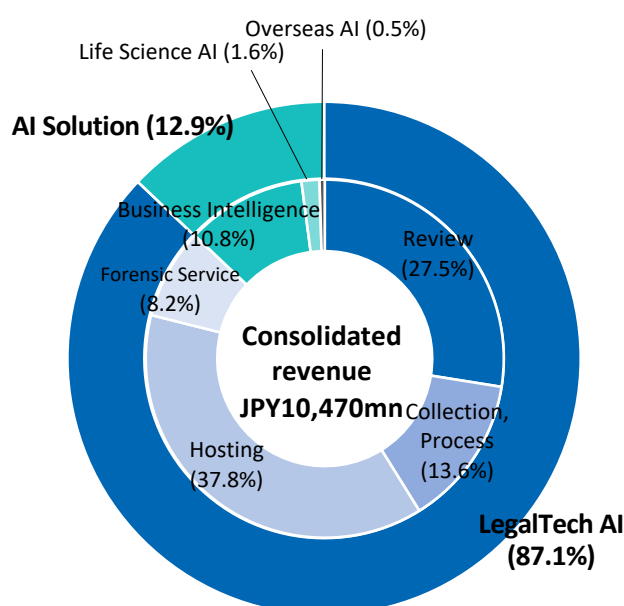
② Business Overview

—Paving the way into life science domain with modality in natural language. Operating AI Solution business drawing on proprietary AI technology.

FRONTEO was founded in August 2003 by current President and CEO Masahiro Morimoto to support Japanese companies with their US and other lawsuits. Initially, it imported related tools from the US, but later developed its own system to provide services optimized for Japanese clients as a one-stop platform for various services. FRONTEO conducted R&D of proprietary AI to streamline the electronic processing of massive volumes of documents in legal discovery. Since 2014, it has been applying this AI technology to services beyond those related to litigation. It currently aims to boost revenue in the Life Science AI business, where it sees robust potential for growth.

In FY3/20, revenue came to JPY10.47bn (87.1% Legal Tech AI, 12.9% AI Solution).

Revenue Weighting by Service (FY3/20)



Source: Sessa Partners from company materials

③ Key Topic: Life Science AI Business Strategy

1. Overview of Life Science AI Business

1) Potential of Dementia Diagnosis Support AI System

In the Life Science AI Business, FRONTEO is developing a dementia diagnosis support AI system, and it aims for pharmaceutical approval by 2023. Countermeasures against dementia is a pressing issue in Japan, where the population is greying rapidly. But standard examination methods of dementia have proved insufficient. And FRONTEO's system leverages its long-accumulated NLP technology, which helps diagnose dementia merely by analyzing 5-10 minutes of conversational text.

AI medical device is a new domain, so FRONTEO hasn't quantified the addressable market of a dementia diagnosis support AI system. But it gives the following data as reference.

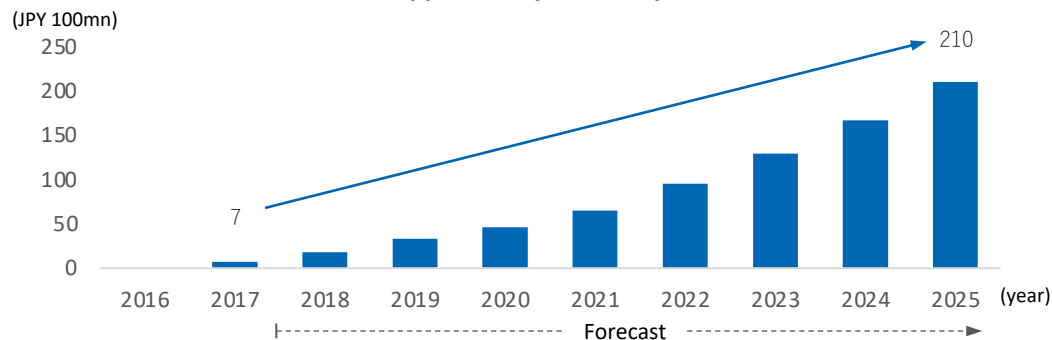
- i) Anticipated no. of patients: 18 million* (late elderly population)
- ii) Anticipated frequency of test: Several times a year
- iii) Medical charges (reference):
 - Easy to operate 80 points (MMSE**, CDR***)
 - Difficult to operate 280 points
 - Very difficult to process/operate 450 points (Logical memory ****)

Note: Points are based on Japan's insurance system that reimburses providers for service.

As for the peripheral market size, the following data can be referenced.

- i) Forecast of market size for MCI support, early discovery, evaluation service/tools (Japan)
The market size for MCI support services/tools in early discovery and evaluation is forecast to grow 53% annually from approx. JPY0.7bn in 2017, to JPY21.0bn in 2025.
(Source: Seed Planning "Current State of Mild Cognitive Impairment (MCI) Services and Future Outlook 2018—Growth Potential of Services to Prevent/Support Early Stages of Dementia," March 30, 2018)

Forecast of Market Size for MCI Support, Early Discovery, Evaluation Service/Tools



- ii) Estimate of global digital health market size in 2023: Approx. JPY12trn
(Source: Mardor Intelligence "Global Mobile Health (mHealth) Market (2018-2023)")

Glossary of Key Terms

*From Cabinet Office's White Paper on Aging Society

<https://www8.cao.go.jp/kourei/whitepaper/index-w.html>
(Japanese)

**MMSE: Mini-Mental State Examination. Examination designed to screen for dementia. Possible to diagnose dementia with a simple examination of 11 items.

***CDR: Clinical Dementia Rating. Examination that evaluates the severity of dementia.

****Logical memory: Examination of memory to identify mild cognitive impairment (MCI). Helps classify elderly patients with normal cognitive functions, MCI, and dementia.

2) Strengthening Development Team

FRONTEO has been strengthening its Life Science AI business, which it considers its next growth driver. It has bolstered the existing team of AI experts by hiring numerous experienced medical professionals.

3) Life Science AI Portfolio

FRONTEO's portfolio in Life Science AI consists of (a) AI diagnosis, (b) AI drug discovery, and (c) AI prediction.

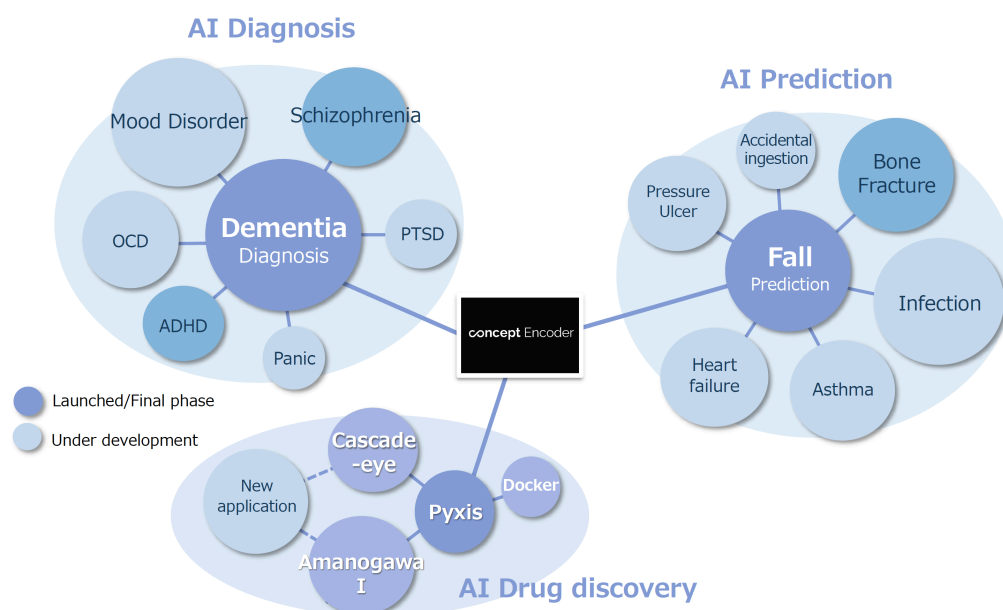
(a) AI diagnosis

FRONTEO is developing a dementia diagnosis support AI system, which will be the world's first language-based AI medical device to hit the market if it receives pharmaceutical approval. Management believes approval of its AI medical device for dementia would set the stage for launching medical devices dealing with other psychiatric disorders.

(b) Drug discovery

In general, drug development costs about JPY200bn over a span of around 10 years. Furthermore, the success rate has recently dropped (1/3000 to 1/5000) due to progress in turning promising compounds to products. Reduction of development costs by improving efficiency of screening drug candidates has thus become an important sticking point. Against this backdrop, FRONTEO offers two modules that utilize its AI x NLP technology: (i) Amanogawa (article search AI system) and (ii) Cascade Eye (drug discovery AI).

FRONTEO's IP and Product Creation Portfolio in Life Science AI



Source: Company materials

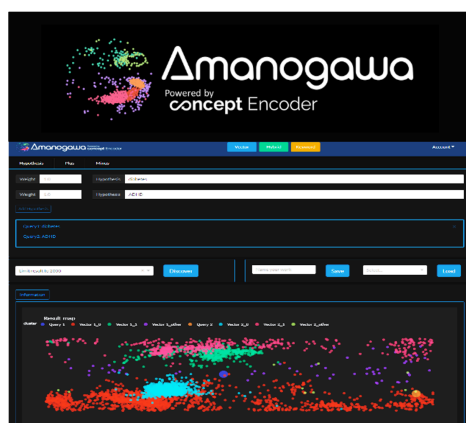
(i) Amanogawa (article search AI system)

Amanogawa uses a feature of FRONTEO's AI engine Concept Encoder called vectorization, which applies AI x NLP to life science by quantifying and visualizing the relevance or similarity of words or sentences in medical articles. This makes it easier and faster to search massive volumes of medical articles and discover new genes or molecules, which couldn't be found through conventional article searches.

(ii) Cascade-Eye (drug discovery AI)

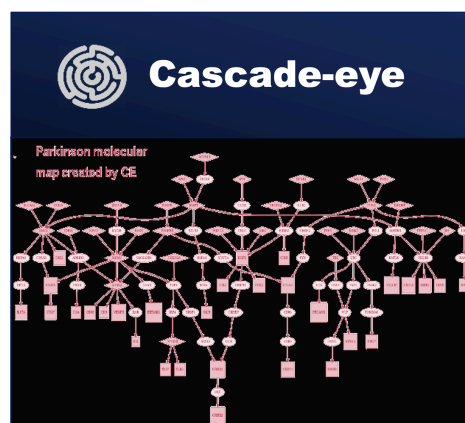
Cascade-Eye displays an image of how genes or molecules relate to a disease on a pathway map by analyzing the latest database of medical articles. This helps realize significant efficiency gains in the target gene or molecule exploration process. And it could prompt the discovery of new approaches hitherto overlooked by human researchers. By doing so, FRONTEO seeks to contribute to drug discovery of diseases with unmet medical needs.

FRONTEO's AI Drug Discovery Systems



Search hundreds of thousands of papers
by content, not by keywords

Discovery of new genes and molecules that
cannot be found in ordinary paper search



Visualize the relationships between
complex genes and molecules

Discovery of new mechanisms of action and
indications that are not noticed in humans

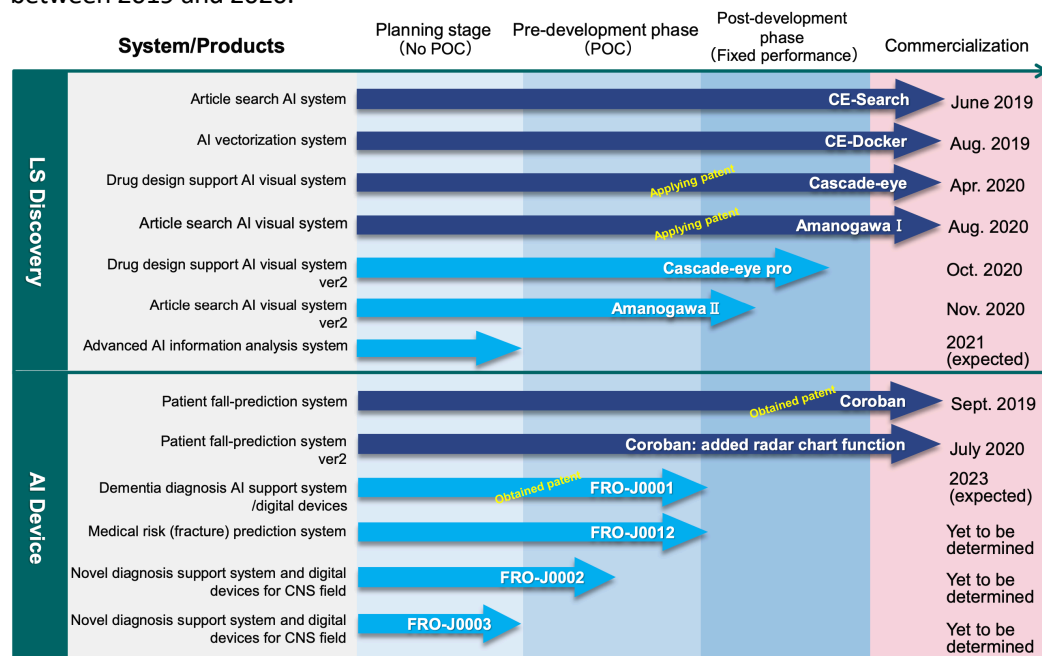
Source: Company materials

(c) AI prediction

FRONTEO launched a fall-prediction system Coroban®, which leverages AI technology to analyze day-to-day patient observations, such as in nursing records, to predict the risk of elderly patients falling. This also helps reduce burden on hospital staff.

4) Development Pipeline

The following is FRONTEO's development pipeline. It launched or upgraded many systems between 2019 and 2020.



Source: Company materials

5) News on Life Science AI

FRONTEO has formed tie-ups with several major pharmaceutical companies, universities, and research institutions aimed at accelerating growth in Life Science AI. Partnerships with leading pharmaceutical companies will likely remain a key growth catalyst in this domain.

Month/Year	Details	AI Drug Discovery	AI Diagnosis	AI Prediction
Dec. 2019	Tie-up with Takeda Pharmaceutical and Iwate Medical University to conduct research on diagnosis and treatment of Parkinson's disease		○	
Mar. 2020	Basic agreement with Kyowa Pharmaceutical on collaborating in dementia diagnosis support system leveraging AI		○	
Mar. 2020	License agreement with Takeda Pharmaceutical on drug discovery support AI system to solve drug discovery issues.	○		
Apr. 2020	Joint research started with Fujita Health University on fall prevention system using AI.			○
May 2020	License agreement with Chugai Pharmaceutical on drug discovery support AI system.	○		
Jun. 2020	Partnership agreement with Kyowa Pharmaceutical on development and sale of new AI medical devices to support dementia diagnosis.		○	
Jul. 2020	License agreement with Keio University School of Medicine on collaborating to commercialize an AI dementia diagnosis support system.		○	
Jul. 2020	Partnership agreement with Axcelead on drug discovery support.	○		
Sep. 2020	License agreement with the Department of Clinical Pharmacology of Tokushima University on article search AI system.	○		

Source: Sessa Partners from company materials

6) Outlook on Life Science AI Business

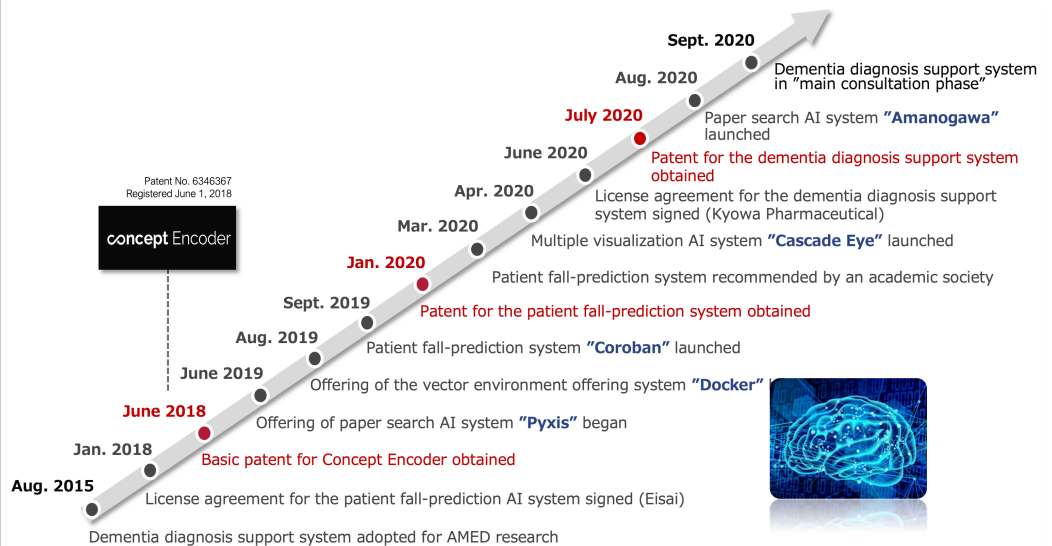
According to a US research company, the AI drug discovery market is forecast to expand from USD250mn in 2019, to USD1,434mn in 2024, an implied annual growth rate of 40.8%. The importance of AI in new drug development is growing. And FRONTEO’s unique strengths in AI x NLP, such as its article search AI system, will likely be a competitive advantage. In addition, the Ministry of Health, Labour and Welfare has announced its policy to promote the approval of AI medical devices. This has reinforced expectations that FRONTEO’s AI diagnosis and prediction systems will be used widely in the future.

In FY3/20, revenue was JPY170mn in Life Science AI (less than 2% of total). But robust growth can be expected going forward, supported by the market’s growth potential and the company’s proprietary technology, coupled with steady progress in partnerships with major pharmaceutical companies and further reinforcement of the sales team.

7) History of Life Science AI Business

Since 2015, FRONTEO has focused on life science as a field in which it can apply AI technology. And it has continued to research and invest in this field to create IP and products. In 2015, its research on dementia diagnosis support system was adopted by Japan Agency for Medical Research and Development (AMED). In 2018, it started the joint development of fall prevention system Coroban® with Eisai. It launched sales of Coroban® in September 2019. In June 2018, it obtained a basic patent for Concept Encoder, an AI that specializes in life science. At present, FRONTEO’s approach of applying language-based AI to life science is unique and unrivaled.

FRONTEO’s History in Life Science AI



Source: Company materials

④ Q1 FY3/21 results

▷ Revenue up 14% YoY, operating line turned positive

In Q1 FY3/21, revenue was JPY2,933mn (+14% YoY), operating income was JPY40mn, ordinary income was JPY41mn, and net income attributable to owners of parent was JPY28mn. Revenue growth lifted profit, pulling it out of the red.

By segment, Legal Tech AI saw robust sales thanks to a large US project. FRONTEO looks to continue to focus on spreading KIBIT Automator adoption and is promoting a shift to an AI-centric business model. Partly due to cost structure reforms undertaken at the US subsidiary in the previous fiscal year, revenue was JPY2,444mn (+6.1% YoY) and segment income was JPY2mn (vs. segment loss of JPY357mn in Q1 FY3/20).

In AI Solution, revenue was on par with last fiscal year for Business Intelligence (JPY234mn) but increased for Life Science AI (JPY253mn) after booking a major project milestone fee. As a result, revenue came to JPY489mn (+74.7% YoY) and segment income was JPY37mn (vs. segment loss of JPY87mn in Q1 FY3/20).

Both segments recorded year-over-year revenue growth and kept the operating line in the black for two consecutive quarters. Ongoing revenue growth in AI Solution will likely bring stable quarterly operating income into sight.

Q1 FY3/21 Consolidated Income Statement

(Million Yen)	FY2019					FY2020	VS. Prior Yr	FY2020
	Q1	Q2	Q3	Q4	YTD	Q1	Inc/Dec	Guidance
Revenue	2,583	2,325	2,586	2,974	10,470	2,933	350	11,000
LegalTech AI	2,303	2,007	2,293	2,513	9,117	2,444	141	9,150
AI Solution	280	318	293	461	1,353	489	209	1,850
Cost Of Revenue	1,670	1,479	1,499	1,779	6,427	1,707	36	
Gross Profit	912	846	1,087	1,195	4,042	1,226	313	
% of Revenue	35%	36%	42%	40%	39%	42%	6%	
Operating Expense	1,357	1,178	1,219	1,132	4,887	1,186	▲170	
Operating Income	▲444	▲331	▲131	62	▲844	40	484	200
LegalTech AI	▲357	▲269	▲64	26	▲665	2	360	150
AI Solution	▲87	▲61	▲66	36	▲178	37	124	50
% of Revenue	▲17%	▲14%	▲5%	2%	▲8%	1%	18%	1.82%
Other Income(-)/Expense(+)	34	17	▲10	106	147	0	▲35	
Ordinary Income	▲479	▲348	▲120	▲43	▲992	41	520	97
% of Revenue	▲19%	▲15%	▲5%	▲1%	▲9%	1%	19%	0.88%
Extraordinary Income(-)/Loss(+)	▲26	153	▲4	23	146	▲30	▲4	
Income Tax	▲13	▲13	▲20	▲177	▲224	40	53	
Minority Interests	4	5	2	3	16	3	▲1	
Net Income	▲444	▲494	▲98	107	▲929	28	472	10
% of Revenue	▲17%	▲21%	▲4%	4%	▲9%	1%	18%	0.09%

(Japan GAPP)

Source: Company materials (Q1 FY3/21 earnings presentation)

5 Future Outlook

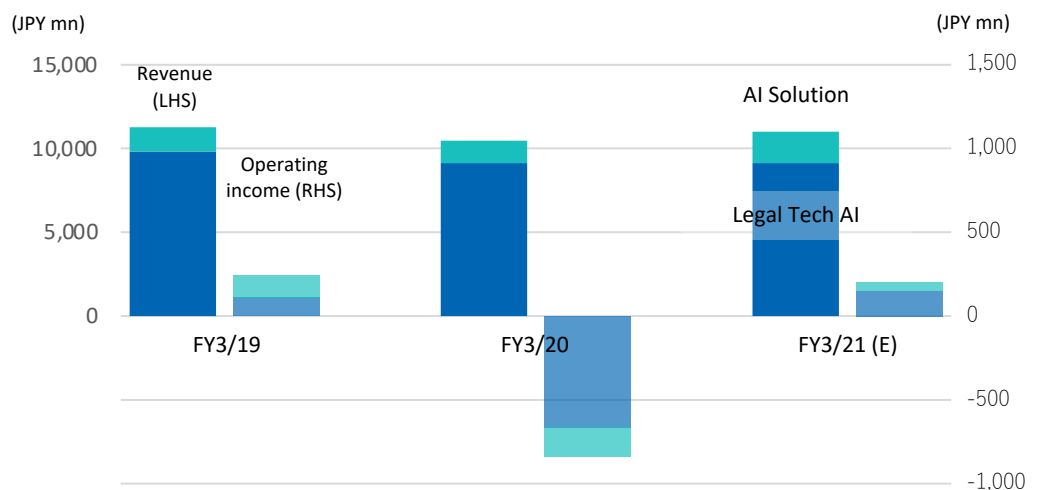
1. Full-Year FY3/21 Forecast: Revenue JPY11.0bn (+5% YoY), Operating Line (- → +)

In FY3/21, FRONTEO forecasts revenue of JPY11.0bn (+5% YoY), operating income of JPY200mn. By segment, it targets revenue of JPY9.15bn (flat YoY) in Legal Tech AI and JPY1.85bn (+37% YoY) in AI Solution.

In the AI Solution business, management aims to continue to focus on growing KIBIT-related sales in Business Intelligence, while expanding joint projects with pharmaceutical companies and pushing ahead on commercializing pipeline services in Life Science AI.

Management plans to lift the operating line to an income of JPY200mn, up JPY1.0bn from a loss of JPY840mn in FY3/20. It cites the following as reasons for the improvement: (1) cost reductions expected from Q2 due to lower costs in the US and delisting from NASDAQ (total cost saving of JPY1.0bn) and (2) expectations for higher revenue to boost profit, offset in part by (3) personnel and marketing investment mainly in sales and R&D.

Outlook for Full-Year FY3/21 Earnings



Source: Sessa Partners from company materials

2. Medium-Term Roadmap

FRONTEO conceives the business to be in Stage 3 (see History on p. 21) and aims to achieve annual revenue of around JPY30.0bn in Stage 4. Although not set in stone, it roughly estimates JPY20.0bn would come from Legal Tech AI and Business Intelligence and JPY10.0bn from Life Science AI.

FRONTEO has dramatically transformed its business from a legal tech company to a data analysis company leveraging AI x NLP. But revenue of JPY30.0bn in Stage 4 appears to be a huge leap, compared to hurdles in prior stages. Clearing this target will require additional personnel investment, while shortages will invariably be faced in high-skilled talent such as data science and life science professionals. Management will be tested to see if it has what it takes to meet the high expectations that appears to be baked into the share price.

⑥ Share Price Information

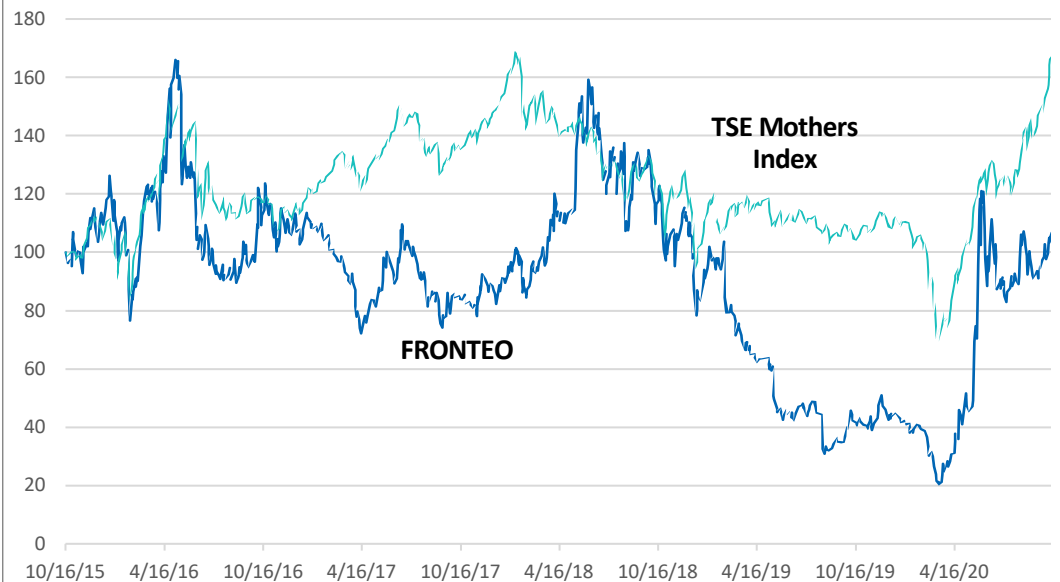
1. Share Price

Share Price Chart (Last 5 Years)



Source: Sessa Partners from SPEEDA

Relative Performance vs. TSE Mothers Index (Last 5 Years)

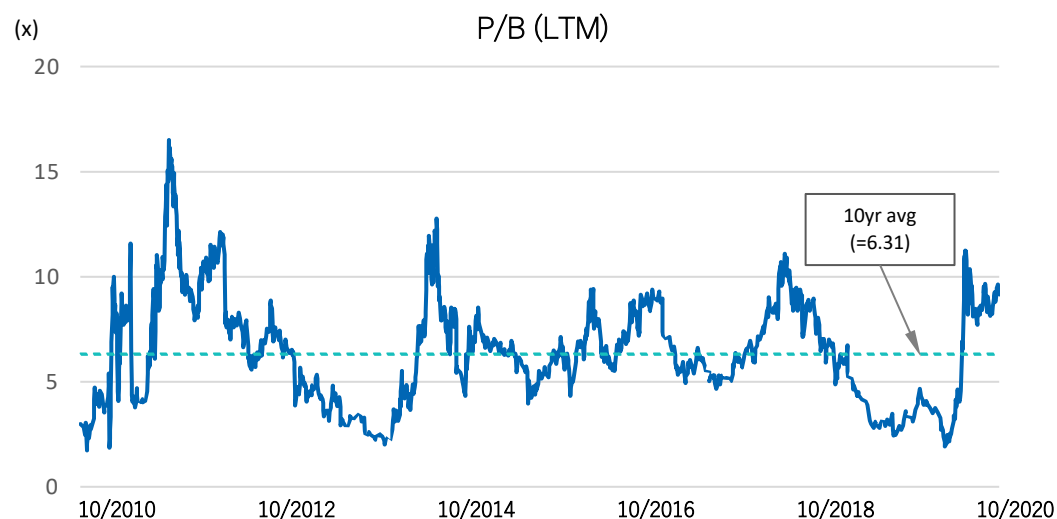


Source: Sessa Partners from SPEEDA

Over the last five years, FRONTEO’s share price has been highly volatile, significantly underperforming the TSE Mothers Index since 2019. The share price hit a YTD low on March 23, 2020. But COVID-19 fueled expectations for its Life Science AI business, propelling the share price upwards and elevating the trading volume.

Based on the P/B ratio, its historical range has been between 5x and 10x. FRONTEO's shares traded below 5x book value in the last two years but has since recovered to 8x book value following the recent uptrend.

Historical Valuation (Last 10 Years)



Source: Sessa Partners from SPEEDA

2. Our View on the Share Price

Since its founding, FRONTEO has ascended the growth stages, boldly confronting new challenges in technology and new domains even after going public to drive its expansion (see History on p. 21 for details on its growth stages). However, the growth investments were funded in large part by debt, with corresponding cost burdens like large goodwill amortization accompanying M&A hampering profit. Note that the Legal Tech AI business is a fee-based model, so most revenue streams are one-offs. Large projects may get pushed back, or lawsuits may reach settlement before going to court, causing volatility to the top line or revenue falling short of guidance. Meanwhile, fixed costs are high (e.g., equipment, personnel), resulting in losses frequently recorded during downturns in revenue.

As a result, it's difficult to analyze FRONTEO's share price based on the P/E ratio. Instead, we compare the actual earnings trends with the share performance (see next page).

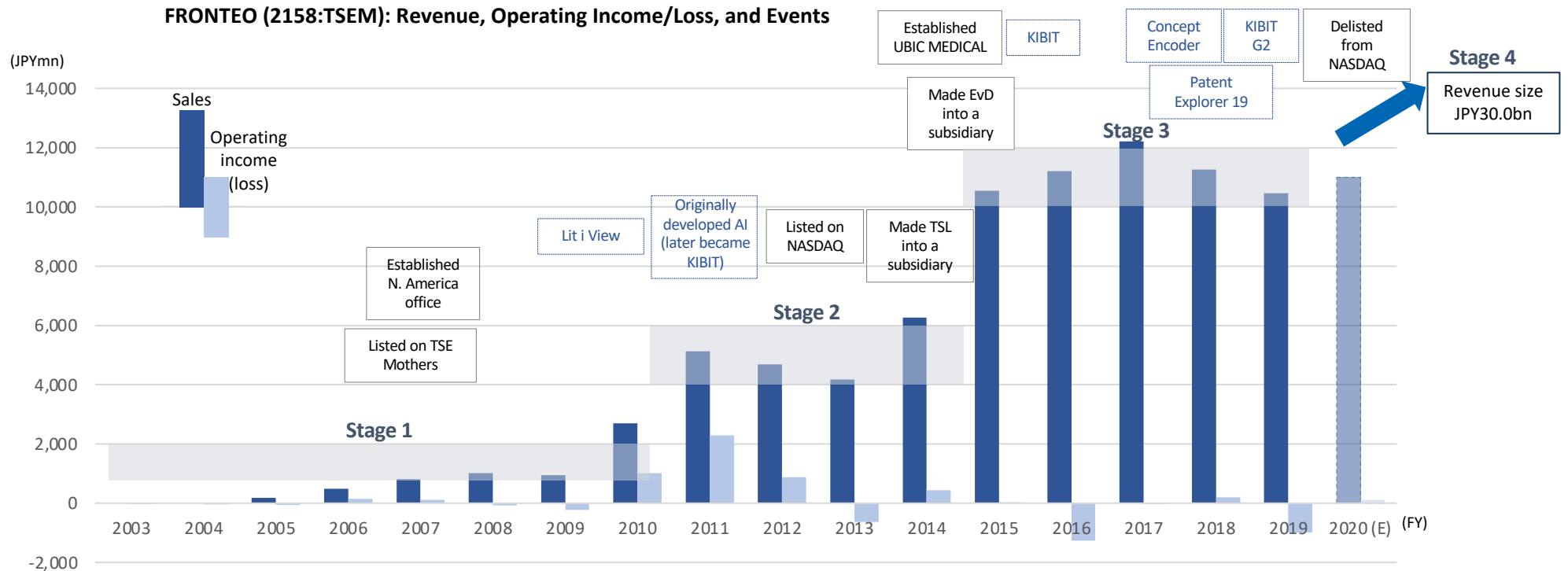
For example, when FRONTEO moved from Stage 1 to Stage 2, it developed a proprietary software that expanded business opportunities and increased earnings. The robust growth in earnings led to a strong share price performance. But, when moving from Stage 2 to Stage 3, it listed shares on NASDAQ and executed M&A and growth investments in the US in a bid to realize further growth. However, revenue came in below expectations, resulting in booking losses. Correspondingly, the share price declined.

Once it entered Stage 3, the M&A contributed to its US subsidiary's revenue, which then amplified earnings. The share price rose on expectations of business growth in the US. But a change in the US lawsuit market (requiring companies to approach clients directly rather than through attorney offices), coupled with sluggish revenues post-transition to an AI-centric model, caused the share price to fall.

FRONTEO (2158:TSEM):
Share Price and Trading Volume



FRONTEO (2158:TSEM): Revenue, Operating Income/Loss, and Events



Source: Sessa Partners from company materials and SPEEDA data

Management deserves praise for aggressively investing to transform the business and drive further growth (i.e., shifting from a litigation support business to an AI data analysis company). That said, the bread-and-butter business is still Legal Tech AI, and the unstable revenue streams in this core business, has likely dampened the share performance (i.e., operating cash flows are outweighed by investing cash flows). Meanwhile, hosting services through sales expansion of AI service KIBIT Automator generates a more recurring stream of revenue in Legal Tech AI. Whether FRONTEO can build on this stable stream of revenue will likely be a key challenge going forward.

The AI Solution business accounts for a minority share of revenue at present, but it's a promising source of future revenue. Notably, FRONTEO has established a unique technology drawing on AI x NLP through its e-discovery business, and the application of this technology is likely to reach many avenues, including risk management compliance and information security. Meanwhile, the push for DX* will likely continue to propel the digitalization of corporate and social practices. In our view, the current share price is justifiable, should FRONTEO post steady growth in Business Intelligence and Life Science AI under the AI Solution business, while realizing lucrative margins and earnings expansion.

3. Comparison of Six AI/Data Analysis Companies Based on Share Price, Financial Data

A comparison of six AI and data analysis companies is shown in terms of share price (below) and financial data (next page). All companies are being traded at high valuations, reflecting expectations for growth. But all have been affected negatively by COVID-19 (e.g., delayed business negotiations) and seen sluggish share price performance, except for FRONTEO's shares, which have delivered a remarkable gain year-to-date.

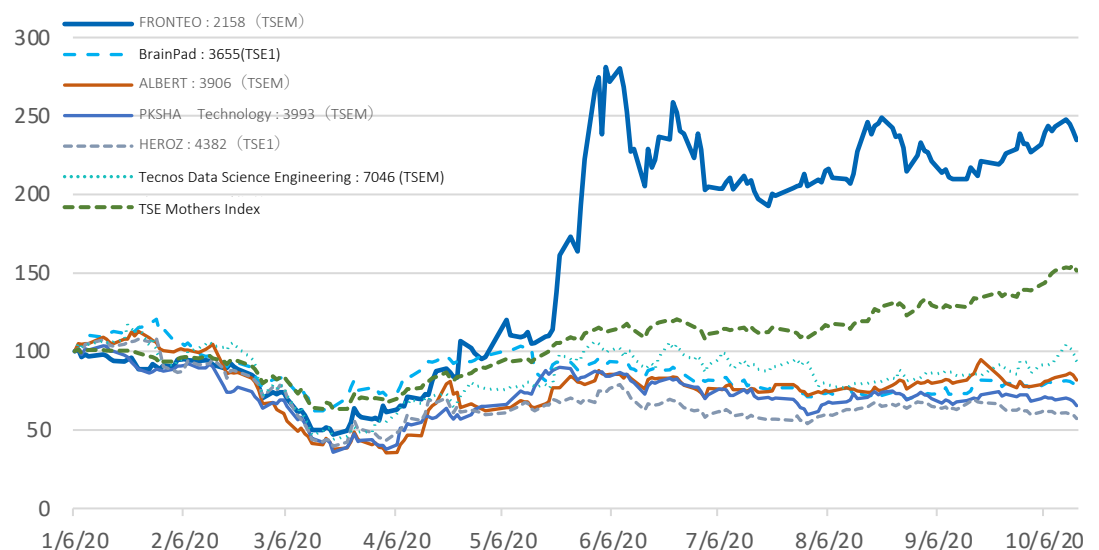
Glossary of Key Terms

*Digital Transformation (DX)

Transformation by which companies respond to changes in the external ecosystem (customers, market) and drive change in the internal ecosystem (organization, culture, employee). Also, a third platform (cloud, mobility, big data/analytics, social technology) is used to establish a new product or service. This new business model helps create value and establish a competitive advantage by spurring change in online-offline customer experience.

(IDC Japan)

Share Price Performance of Sector Peers (YTD; indexed to 100 on 6 January 2020)



Source: Sessa Partners from SPEEDA



YTD Share Price Performance (Indexed to 100 on 6 January 2020)

(Unit: JPY mn, JPY)

Code	2158 (TSEM)	3655 (TSE1)	3906 (TSEM)	3993 (TSEM)	4382 (TSE1)	7046 (TSEM)
Company Name	FRONTEO	BrainPad	ALBERT	PKSHA Technology	HEROZ	Tecnos Data Science Engineering
Fiscal Year	2020/3	2020/3	2019/12	2019/9	2020/4	2020/3
Share Price (6/19)	798	4,245	6,710	2,458	3,265	3,090
Market Cap.	30,455	31,543	29,876	75,288	48,725	6,798
PER (X)	3,045.4	128.7	257.9	40.7	324.8	21.6
PBR (X)	10.00	7.76	9.56	2.80	7.87	4.87
Dividend Yield (%)	0.00	0.00	0.00	0.00	0.00	0.00
Year to date change	130.6%	-23.6%	-20.2%	-38.1%	-44.1%	-9.6%
YH	1,056(6/2)	6,680(1/30)	9,330(1/24)	3,925(1/6)	6,170(1/14)	3,905(1/22)
YL	156(3/23)	3,155(3/17)	2,800(4/6)	1,329(3/19)	2,108(3/23)	1,360(3/23)
10YH	1,421(14/8/26)	9,300(19/5/23)	16,730(18/11/29)	8,365(18/1/29)	12,412.5(18/4/24)	7,680(18/12/19)
10YL	26.7(11/1/21)	405(11/11/28)	999(15/12/25)	1,329(20/3/19)	2,108(20/3/23)	1,360(20/3/23)
Financial indicators						
ROE	-12.8%	25.5%	7.1%	2.5%	6.2%	6.8%
ROA	-3.8%	19.4%	5.0%	2.2%	6.0%	5.1%
ROIC	-1.8%	22.1%	3.8%	2.9%	8.6%	5.6%
Equity ratio	29.8%	80.8%	87.0%	87.6%	96.5%	66.5%
Index per shares						
Shares out (thousand shares)	38,164	7,366	4,453	30,599	14,923	2,200
EPS (¥)	-24.37	120.46	54.88	15.00	17.84	44.08
BPS (¥)	79.77	546.84	727.00	875.79	414.46	634.50
DPS (¥)	0.00	0.00	0.00	0.00	0.00	10.00
Financial data						
Net Sales	10,471	6,621	2,324	3,061	1,544	1,377
3Y CAGR	-2.2%	23.3%	41.9%	88.1%	20.7%	19.0%
Gross Profit	4,043	3,017	1,483	1,630	767	589
Gross margin	38.6%	45.6%	63.8%	53.3%	58.7%	42.8%
Operating Profit	-844	1,061	190	721	459	126
3Y CAGR	-	92.8%	-	65.9%	72.8%	4.6%
Operating profit margin	-8.1%	16.0%	8.2%	23.6%	29.7%	9.2%
Ordinary Profit	-992	1,079	194	593	405	128
3Y CAGR	-	95.7%	-	55.4%	62.7%	4.9%
Ordinary profit margin	-9.5%	16.3%	8.3%	19.4%	26.2%	9.3%
Net Profit attributable to owners of parent	-930	858	188	410	255	90
3Y CAGR	-0.6%	78.4%	-	52.3%	39.5%	4.4%
Net profit margin attributable to owners of parent	-8.9%	13.0%	8.1%	13.4%	16.5%	6.5%
EBITDA	150	1,252	235	898	522	133
EBITDA margin	1.4%	18.9%	10.1%	29.3%	33.8%	9.7%
Cash Flows Statements						
Cash Flows from Operating Activities	-229	761	28	432	243	75
Cash Flows from Investing Activities	-785	-243	-21	-4,142	-78	-818
Cash Flows from Financial Activities	-1,553	389	-282	20,959	3,904	480
Free Cash Flows	-1,014	518	7	-3,710	165	-743

Note: Brainpad's NTM P/E is derived by taking the average of the lower and upper bounds of earnings forecast.

Source: Sessa Partners from SPEEDA

4. Major Shareholders

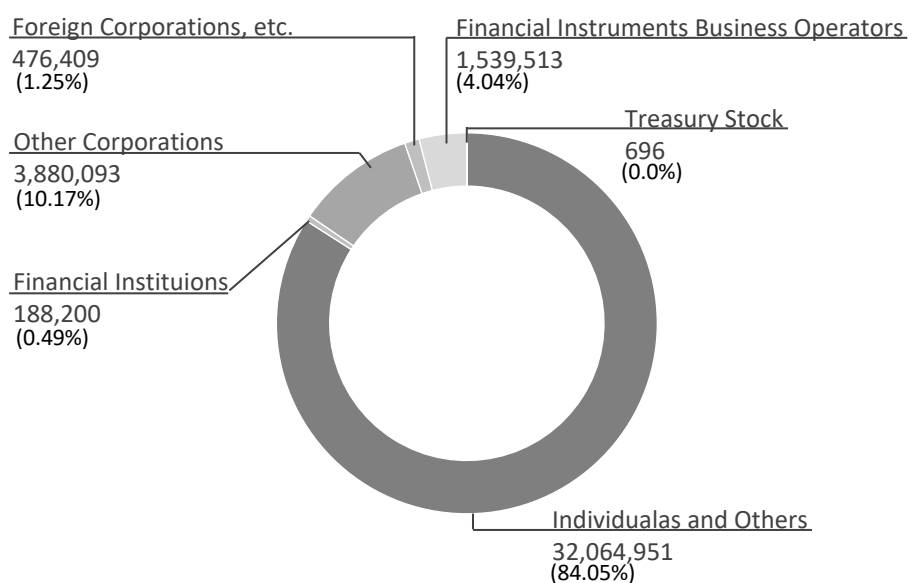
Major shareholders (as of end-March 2020) are shown below. Focus Systems Corporation has held FRONTEO's shares since the early days of its founding, and it has had a consignment agreement with FRONTEO to sell its tools and other products. Both companies are on good terms with each other.

Major shareholders

Rank	Name	No. of shares owned	Ownership ratio (%)
1	Masahiro Morimoto	6,935,900	18.18
2	Focus Systems Corporation	2,984,720	7.82
3	Naritomo Ikeue	2,712,800	7.11
4	Tadahiro Kanbayashi	361,400	0.94
5	Rakuten Securities, Inc.	237,200	0.62
6	SMBC Nikko Securities Inc.	231,000	0.60
7	Kelly Hearts, Inc.	218,000	0.57
8	Japan Securities Finance Co., Ltd.	185,800	0.48
9	Setsuo Sakamoto	156,000	0.40
10	FRONTEO Employee Stockholding Association	145,300	0.60
Total		14,168,120	37.13

Note: Ownership ratio is the no. of shares / total shares outstanding (less treasury shares).

5. Breakdown by Shareholder Type



Source: Sessa Partners from Company materials

7 Financial Statements

Income Statement

(Unit: JPY mn)

Fiscal Year	3/2010	3/2011	3/2012	3/2013	3/2014	3/2015	3/2016	3/2017	3/2018	3/2019	3/2020
Total Revenue	945	2,705	5,133	4,680	4,172	6,274	10,553	11,208	12,218	11,262	10,471
YoY	-7.0%	186.2%	89.8%	-8.8%	-10.9%	50.4%	68.2%	6.2%	9.0%	-7.8%	-7.0%
Total Cost of Sales	567	963	1,622	1,824	2,310	3,143	5,850	6,874	6,991	6,328	6,428
Gross Profit	379	1,742	3,511	2,855	1,862	3,131	4,703	4,334	5,227	4,934	4,043
Gross margin	40.1%	64.4%	68.4%	61.0%	44.6%	49.9%	44.6%	38.7%	42.8%	43.8%	38.6%
SG&A Expenses	567	678	1,235	1,935	2,460	2,865	4,633	5,541	5,049	4,689	4,887
SG&A Expenses ratio	60.0%	25.1%	24.1%	41.3%	59.0%	45.7%	43.9%	49.4%	41.3%	41.6%	46.7%
Operating Profit	(188)	1,064	2,276	920	(599)	266	69	(1,207)	178	244	(844)
YoY	-	-	113.9%	-59.6%	-	-	-74.1%	-	-	37.1%	-
Operating profit margin	-19.9%	39.3%	44.3%	19.7%	-14.4%	4.2%	0.7%	-10.8%	1.5%	2.2%	-8.1%
Non-Operating Income	2	1	19	171	133	216	29	52	85	98	36
Non-Operating Expenses	37	52	9	219	164	48	75	100	279	139	183
Ordinary Profit	(223)	1,013	2,286	872	(630)	434	25	(1,255)	(17)	203	(992)
YoY	-	-	-	-61.9%	-	-	-94.7%	-	-	-	-
Operating profit margin	-23.6%	37.4%	44.5%	18.6%	-15.1%	6.9%	0.2%	-11.2%	-0.1%	1.8%	-9.5%
Extraordinary Gain							1	1	12	44	43
Extraordinary Loss	248	1			35		33	117	856	17	189
Pretax Profit	(471)	1,011	2,286	872	(665)	434	(9)	(1,371)	(861)	231	(1,138)
Income Taxes	(7)	282	978	368	(65)	172	182	(429)	(43)	168	(225)
Net Profit attributable to owners of parent	(464)	730	1,305	500	(604)	260	(194)	(948)	(828)	52	(930)
YoY	-	-	78.8%	-61.7%	-	-	-	-	-	-	-
Net Profit			1,308	505	(600)	262	(191)	(942)	(818)	62	(913)
Net Profit attributable to non-controlling shareholders		-1	3	4	5	2	6	6	11	10	16
Net profit margin attributable to owners of parent	-49.1%	27.0%	25.4%	10.7%	-14.5%	4.1%	-1.9%	-8.5%	-6.8%	0.5%	-8.9%
(Supplemental Data)											
EBIT	(461)	1,022	2,289	878	(663)	430	(6)	(1,360)	(821)	253	(1,130)
EBITDA	(113)	1,117	2,431	1,211	(162)	860	1,069	(37)	1,368	1,215	150
EBITDA margin	-12.0%	41.3%	47.4%	25.9%	-3.9%	13.7%	10.1%	-0.3%	11.2%	10.8%	1.4%
(Detail of Expenses)											
Total Payroll	271	301	445	687	921	1,141	1,918	2,378	2,182	1,805	1,919
Total payroll ratio	28.7%	11.1%	8.7%	14.7%	22.1%	18.2%	18.2%	21.2%	17.9%	16.0%	18.3%
R&D Expenses	8		12	24	123	89	92	84	119	62	75
Depreciation	75	53	155	291	437	588	884	1,039	1,015	817	843
No. of employees (fiscal year end)	56	61	111	149	160	191	423	486	362	387	335
YoY	5.7%	8.9%	82.0%	34.2%	7.4%	19.4%	121.5%	14.9%	-25.5%	6.9%	-13.4%

Source: Sessa Partners from SPEEDA

Balance Sheet

(Unit: JPY mn)

Fiscal Year	3/2010	3/2011	3/2012	3/2013	3/2014	3/2015	3/2016	3/2017	3/2018	3/2019	3/2020
Total Assets	803	2,317	4,884	4,756	4,889	7,642	12,919	16,159	14,579	13,443	10,462
Current Assets	509	1,686	3,674	2,766	2,760	4,623	5,412	9,034	8,191	6,863	4,708
Cash, Cash Equivalents & ST Investments	345	675	2,411	1,300	1,486	2,726	1,799	4,536	5,131	3,926	1,572
Cash & Cash Equivalents	345	675	2,411	1,300	1,486	2,726	1,799	4,536	5,131	3,926	1,572
Accounts Receivables	118	946	1,017	1,171	873	1,570	2,873	3,320	2,631	2,667	2,564
Inventories	1	1	4	2	7	7	9	73	41	4	4
Finished Goods and Merchandise	0	0	0	0	0	1	2	69	37	1	0
Other Inventories	1	1	4	2	7	6	7	4	3	3	4
Deferred tax assets - current	10	38	84	54	149	56	165	661	110		
Allowance for doubtful accounts - cur.	-1	-13	-8			-25	-75	-166	-81	-85	-106
Non-Current Assets	294	631	1,209	1,990	2,129	3,019	7,507	7,125	6,388	6,580	5,753
Property, Plant and Equipment	69	85	336	749	671	783	1,105	1,177	763	743	648
Intangible Assets	73	254	486	838	942	1,576	5,361	5,027	4,384	4,539	4,310
Goodwill						169	2,221	2,001	1,807	1,734	1,549
Investments and other assets	151	292	387	402	516	659	1,041	920	1,241	1,297	795
Investment Securities (incl. subs/affil)	108	223	274	267	373	512	640	500	849	872	608
Investment Securities	108	223	274	267	373	512	640	500	849	872	608
Long-term trade receivable	5	5	5								
Deferred tax assets - n-current		16				12	1	4	3	11	19
Allowance for doubtful accounts - n-cur.	-5	-5	-5								
Total Liabilities	568	1,144	2,228	1,561	1,356	2,421	8,263	11,140	10,225	8,821	7,151
Current Liabilities	304	807	1,747	1,030	788	1,448	3,505	3,697	4,144	4,747	5,990
Trade Payables	20	73	59	82	62	92	363	513	144	138	118
Accounts Payable - Other, Accrued Exp	64	147	380	424	263	341	1,266	196	275	332	250
Short-Term Debt	189	142	207	185	285	493	774	1,829	2,511	3,284	4,603
Short-Term Borrowings (incl. Lease Oblig)	30		63			36	52	1,000	1,500	1,100	1,600
Current Portion of LT Debt	159	142	144	185	285	457	722	829	1,011	2,184	3,003
Cur. Portion of LT Borrowings	159	142	144	185	285	457	722	829	1,011	934	3,003
Current Portion of Bonds with Warrants										1,250	
Deferred Tax Liabilities - cur.						6			5		
Non-Current Liabilities	264	337	481	531	568	973	4,758	7,443	6,081	4,073	1,161
Long-Term Debt	252	321	423	438	444	773	3,813	6,177	5,383	3,475	761
LT Borrowings (incl. Lease Oblig)	252	110	316	438	444	773	3,813	4,927	4,133	3,475	761
Convertible Bonds		211	107								
Bond with Warrants								1,250	1,250	0	
Deferred Tax Liabs - non-cur.	0		16	56	66	116	841	758	303	168	62
Provision for Retirement Benefits	6	7	10	11	19	37	30	36	41	50	64
Asset Retirement Obligations - non-current			17	17	30	44	44	45	45	46	46
Total Net Assets	235	1,173	2,655	3,195	3,533	5,221	4,656	5,019	4,354	4,622	3,310
Total Shareholders' Equity	235	1,166	2,643	3,178	3,512	5,208	4,637	4,987	4,315	4,572	3,244
Shareholders' Equity	247	1,065	2,456	2,918	3,139	4,585	4,352	4,848	4,071	4,226	3,168
Capital Stock	452	497	550	603	1,095	1,688	1,706	2,482	2,507	2,559	2,569
Capital Surplus	240	284	337	390	883	1,476	1,493	2,266	2,292	2,343	2,353
Retained Earnings	-446	284	1,570	1,925	1,161	1,421	1,153	100	-728	-676	-1,753
Treasury Stock	0	0	0	0	0	0	0	0	0	0	0
Accumulated Other Comprehensive Income	-11	100	137	159	177	411	12	-70	-23	118	-125
Valuation Difference On Available-for-sale Securities		113	146	141	144	240	298	273	514	530	381
Deffered hedge gain/loss							-4				
Foreign Currency Translation Adjust.	-11	-13	-8	17	33	171	-283	-342	-537	-412	-506
Share Warrants		1	50	102	197	211	273	209	266	228	201
Non-controlling interest		7	12	17	21	13	19	32	39	50	66

Source: Sessa Partners from SPEEDA

Supplementary Data

(Unit: %, JPY mn, x)

Fiscal Year	3/2010	3/2011	3/2012	3/2013	3/2014	3/2015	3/2016	3/2017	3/2018	3/2019	3/2020
Shareholders' Equity Ratio	29.27	50.32	54.12	66.82	71.83	68.15	35.89	30.86	29.60	34.01	31.01
ROE	-100.87	104.21	68.52	17.18	-18.06	5.96	-4.00	-19.70	-17.80	1.17	-23.80
ROA	-46.42	46.79	36.24	10.37	-12.52	4.15	-1.92	-6.52	-5.39	0.37	-7.78
ROIC	-20.96	67.65	52.75	15.54	-13.22	1.75	-1.44	-6.99	1.75	0.64	-6.17
Interest-bearing Debt	441	463	630	623	729	1,266	4,587	8,006	7,893	6,759	5,364
D/E Ratio	1.88	0.40	0.24	0.20	0.21	0.24	0.99	1.61	1.83	1.48	1.65
Net D/E Ratio	0.41	-0.18	-0.67	-0.21	-0.22	-0.28	0.60	0.70	0.64	0.62	1.17
Total Interest Bearing Debt/EBITDA		0.41	0.26	0.51		1.47	4.29		5.77	5.56	35.76
Net Total Interest Bearing Debt/EBITDA							2.61		2.02	2.33	25.28
Accumulated Depreciation	98	120	202	331	514	791	1,033	1,104	1,214	1,454	1,457
Investments in Affiliates and Loans	108										
Investments in Affiliates	108										
(Fair Value Information)											
Book Value – Securities not measured by the Mark-to- Market Method	0	0	0	0	0	0	0	0	0	0	0
Unrealized Gains/Losses - Derivatives								-8			

Source: Sessa Partners from SPEEDA

Statement of Cash Flows

(Unit: JPY mn)

Fiscal Year	3/2010	3/2011	3/2012	3/2013	3/2014	3/2015	3/2016	3/2017	3/2018	3/2019	3/2020
Cash Flows from Operating Activities	-6	459	2,074	124	27	1,023	617	-198	1,495	731	-229
Depreciation and Amortization - CF	75	53	155	291	437	594	1,000	1,170	1,190	971	994
Depreciation - CF	75	53	155	291	437	588	884	1,039	1,015	817	843
Amortization of Goodwill - CF						6	116	131	175	154	151
Gain/Loss on Val. of Sec. & Invest. Sec.	109										
Gain/Loss on Sale of PPE	0						27	43	1	8	5
Interest and Dividends Received – Operating CF	0	0	5	5	7	11	13	18	14	17	25
Interest Paid – Operating CF	-10	-8	-7	-11	-9	-7	-14	-23	-43	-40	-32
Cash Flows from Investing Activities	-65	-236	-557	-1,139	-653	-1,417	-4,711	-1,643	-709	-966	-785
Payments for Purchase of Securities and Investment Securities					-102						
Payments for Purchase of Investment Sec.					-102						
Proceeds from Sales of Securities and Investment Securities								100			
Proceeds from Sales of Investment Securities								100			
Payments for Purchase of Affil Stock	-1	-19	-243	-514	-175	-203	-671	-318	-211	-253	-214
Purchase/Sales of PPE	-1	-19	-243	-514	-175	-203	-674	-328	-211	-253	-214
Payments for Purchase of PPE							3	10	0		
Proceeds from Sales of PPE	-68	-208	-278	-518	-353	-419	-382	-502	-408	-661	-587
Purchase/Sales of Intangible Assets	-68	-208	-278	-518	-353	-419	-382	-502	-408	-661	-587
Payments for Purchase of Intangible Ass.								0			
Proceeds from Sales of Intangible Assets	-65	-236	-557	-1,139	-653	-1,417	-4,711	-1,643	-709	-966	-785
Cash Flows from Financial Activities	81	116	219	-283	757	1,680	3,214	4,564	-139	-1,012	-1,553
Proceeds from Short-Term Loans	30		63			200	3,800	4,370	3,100	1,190	1,600
Repayment of Short-Term Loans		-30		-63		-164	-3,784	-3,422	-2,600	-1,590	-1,100
Increase in Long-Term Debt	180	285	350	350	300	800	3,762	4,356	200	400	300
Proceeds from Long-Term Loans	180		350	350	300	800	3,762	1,856	200	400	300
Proceeds from Issuance of Bonds		285						2,500			
Repayments of Long-Term Debt	-135	-159	-142	-187	-210	-288	-455	-751	-826	-1,001	-2,193
Repayments of Long-Term Loans	-135	-159	-142	-187	-210	-288	-455	-751	-826	-1,001	-943
Redemption of Bonds											-1,250
Proceeds from Issuance of Stock	6	13			985	1,157	21	184	32	68	12
Redemption/Retirement of Stock		0									
Cash Dividends Paid			-20	-146	-160		-106	-107			-114
Foreign exchange adjustment	-13	-9	-1	82	53	55	-41	15	-53	42	-32
Changes in Cash Flow	-3	330	1,735	-1,215	183	1,340	-922	2,737	594	-1,205	-2,600
Cash & Cash Equivalent - Beginning	348	345	675	2,410	1,195	1,378	2,718	1,796	4,533	5,127	3,923
Cash & Cash Equivalent - Ending	345	675	2,410	1,195	1,378	2,718	1,796	4,533	5,127	3,923	1,323
Free Cash Flows	-71	223	1,517	-1,015	-626	-394	-4,094	-1,841	786	-235	-1,014

Source: Sessa Partners from SPEEDA

⑧ Company Overview

1. History: Realizing growth through bold challenges

FRONTEO's growth story can be divided into three stages based on its developmental phases (see History table on next page).

Stage 1 (Founding [Aug. 2003] to Q3 2010): Imported technology from the US

Stage 2 (Q4 2010 to Q4 2014): Expanded by developing proprietary technology

Stage 3 (2015 to present): Establishing global structure and expanding applications of AI technology to new fields

Glossary of Key Terms

***Computer forensic:** A series of scientific research methods and techniques to analyze and collect data on alteration or damage of electronic data, through evidence preservation and investigation/analysis of electronic data. Used in incident response, legal disputes, and lawsuits.

Side note 1

In the SPE sector, Tokyo Electron initially imported SPEs, but accumulated its own technology through maintenance of imported equipment. Later, it began manufacturing SPEs and is now the world's No. 3 manufacturer. Previously, CEO Morimoto worked for Applied Materials, showing similarities between the development process of TEL and FRONTEO.

Stage 1: Imported technology from the US. Initially, the company's only way of providing litigation service was to import software from the US. It acquired exclusive import and sales rights in Japan of a US computer forensics* tool. It used this tool to offer forensic and discovery support services to Japanese clients. Heightened awareness of international lawsuits later boosted the company's growth. In June 2007, FRONTEO listed its shares on TSE Mothers in just a short period since its founding. As most litigations were in the US, it established a wholly-owned US subsidiary in December 2007.

Stage 2: Expanded by developing proprietary technology. FRONTEO soon faced limitations to the imported software, not only due to language but also compatibility with software native to Japan, hindering litigation service provision to Japanese clients. Management decided to develop an in-house system and launched an originally developed system, Lit i View, in December 2009. Lit i View E-DISCOVERY was the world's first legal tech tool to support AI analysis in an Asian language, and it offered a one-stop support, from data preservation to submission form creation. This enabled clients to conduct e-discovery efficiently and at low cost, while protecting unrelated information from being divulged.

As Japanese companies became keener in dealing with international lawsuits, FRONTEO made progress in acquiring large projects, and this brought annual revenue to JPY5.0bn. Also, by leveraging Lit i View, it eliminated many tasks, resulting in improved profit.

In May 2013, management decided to list the shares on NASDAQ to raise brand awareness in the US, the main battleground of international lawsuits. In August 2014, it acquired TechLaw Solutions, Inc. (VA; annual revenue JPY1.3bn), an e-discovery business.

Stage 3: Establishing global structure and expanding applications of AI technology to new fields. In July 2015, FRONTEO acquired EvD, Inc. (CA; annual revenue JPY5.0bn) to further build presence in the US. By adding TLS in the East Coast and EvD in the West Coast, the company established an even more robust sales foundation in the US. The acquisition of these two companies lifted US sales above Japan sales, and FRONTEO's consolidated sales increased sharply beyond the JPY10.0bn/year threshold.

While upgrading Lit i View, FRONTEO also worked to develop a proprietary AI technology. Forensic and e-discovery require massive volumes of documents to be processed. Utilizing big data to process documents rapidly was crucial in improving efficiency and reducing costs. FRONTEO strove to polish its proprietary AI technology in developing legal tech and conducted research to apply this technology to fields outside of litigation. In August 2015,

**History**

Month	Year	Overview
Aug.	2003	Established Universal Business Incubators Co., Ltd.
Jun.	2004	Acquired exclusive import and sales right in Japan for a forensic tool from two US forensic tool companies, Intelligent Computer Solutions, Inc. and Access Data Corp.
Aug.		Changed trade name to UBIC Inc. and specialized in computer forensics Started selling forensic tools
Nov.		Acquired exclusive import and sales right in Japan for a forensic tool from US forensic tool company Digital Intelligence, Inc.
May	2005	Built a forensic lab
Jun.		Started a computer forensic service (supports computer forensic investigation and discovery)
Jun.	2007	Listed on Mothers Market of Tokyo Stock Exchange
Dec.		Established UBIC North America, Inc.
Mar.	2009	Received information security management system (ISMS) certification for ISO 27001 (ISO/IEC 27001:2005), an international standard, and JIS Q 27001 certification, a national standard.
Dec.		Released Lit i View, an e-discovery software
Aug.	2010	Established Payment Card Forensics, Inc. (now P.C.F. FRONTEO, Inc.) specializing in credit card fraud investigation
Apr.	2011	Established UBIC Risk Consulting, Inc.
Oct.		Established UBIC Taiwan, Inc. (now FRONTEO Taiwan, Inc.)
Dec.		Established UBIC Korea, Inc. (now FRONTEO Korea, Inc.)
Mar.	2012	Released original AI solution (later became KIBIT)
Jun.		Established UBIC Patent Partners, Inc.
Jan.	2013	Released Lit i View ver. 6 equipped with advanced predictive coding functions
May		Listed on NASDAQ (delisted in February 2020)
Aug.	2014	Acquired US e-discovery company TechLaw Solutions, Inc. and made it a consolidated subsidiary
Mar.	2015	Conducted absorption-type merger with UBIC Risk Consulting, Inc., with UBIC, Inc. as the surviving company
Apr.		Established a medical information data analysis business UBIC MEDICAL, Inc. (later became a consolidated subsidiary and changed trade name to FRONTEO Healthcare, Inc.)
Jul.		Acquired EvD, Inc. an e-discovery company in the US and made it a consolidated subsidiary (now FRONTEO USA, Inc.)
Sep.		Established a digital marketing business Rappa, Inc. (later became consolidated subsidiary and changed trade name to FRONTEO Communications, Inc.)
Oct.		Conducted an absorption-type merger with UBIC Patent Partners, Inc., with UBIC, Inc. as the surviving company
Nov.		Announced originally developed AI solution, KIBIT, based on natural language processing
Jul.	2016	Changed trade name to FRONTEO, Inc., meaning “progressive and leading value creators group” Changed trade name of UBIC MEDICAL, Inc. to FRONTEO Healthcare, Inc. Conducted an absorption-type merger with UBIC North America, Inc. with EvD, Inc. as the surviving company, and established FRONTEO USA, Inc.
May	2018	FRONTEO Healthcare made full-scale launch of AI system Concept Encoder specializing in healthcare FRONTEO Healthcare received a patent for AI system Concept Encoder
Jul.		Started offering FAQ system KIBIT Find Answer based on AI system KIBIT
Aug.		FRONTEO Healthcare started offering AI application Concept Encoder Articles
Nov.		Started offering Patent Explorer 19, an evolved version of AI patent investigation and analysis system Evolved originally developed AI engine and started offering next-generation version KIBIT G2 FRONTEO Healthcare developed a new drug candidate exploration technology using AI system Concept Encoder
Mar.	2019	Released AI review tool KIBIT Automator
Oct.		Conducted absorption-type merger with FRONTEO Healthcare, Inc., with FRONTEO, Inc. as the surviving company
Feb.	2020	Delisted from NASDAQ

Source: Sessa Partners from company materials

Glossary of Key Terms

***Behavioral information science:** Concept devised by FRONTEO that combines information science (statistics, mathematics, data mining, pattern recognition technology) with behavioral science (psychology, criminology, sociology). FRONTEO states conventional approaches only “extracted the facts” by analyzing past events. But behavioral information science enables “predicting the future” in accordance with human cognition based on behavioral and community patterns.

FRONTEO released its proprietary AI system KIBIT, which draws on behavioral information science (its long-standing research area) while functioning as an AI specializing in language processing. Recently, FRONTEO has expanded beyond Legal Tech AI into AI Solution, under which it operates Business Intelligence (e.g., business data analysis, email monitoring, patent analysis to financial and manufacturing sectors) and Life Science AI (e.g., drug discovery and diagnosis support). It has been seeing sharp revenue growth in this domain.

Through the stages explained above, FRONTEO transformed itself from a litigation service at the time of its founding to an AI and data analysis company possessing unique strengths in NLP. Going forward, management aims to further expand revenue in the AI Solution business, targeting **revenue of JPY30.0bn in Stage 4**.

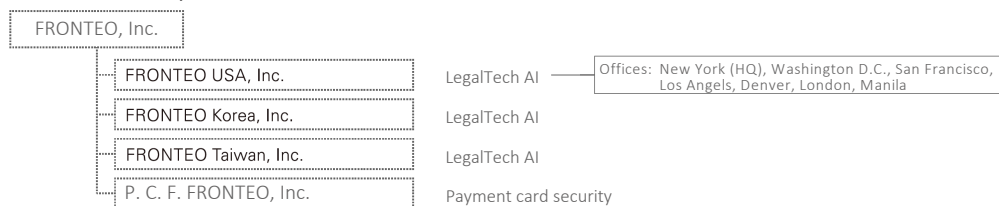
2. Group Overview

At present, FRONTEO has subsidiaries in Taiwan, Korea, and the US with a total of nine offices globally. In the US, it strengthened the sales structure by reorganizing the two companies it acquired and the subsidiary it established earlier.

In Japan, it bolstered the organizational structure and efficiency by merging its healthcare subsidiary with the parent company.



FRONTEO Group



Source: Company materials

4. Service and Features

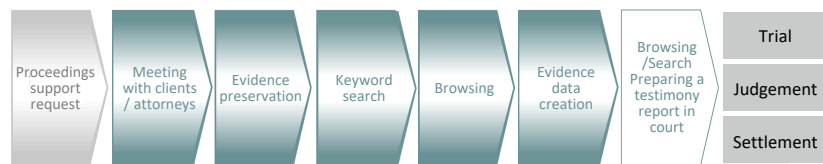
FRONTEO operates two business segments: 1) Legal Tech AI and 2) AI Solution. Legal Tech AI is its founding business that breaks down into (a) E-discovery Service and (b) Forensic Service. AI Solution applies the AI technology accumulated in legal tech to other domains, and it is divided into (a) Business Intelligence and (b) Life Science AI.

1) Legal Tech AI Business

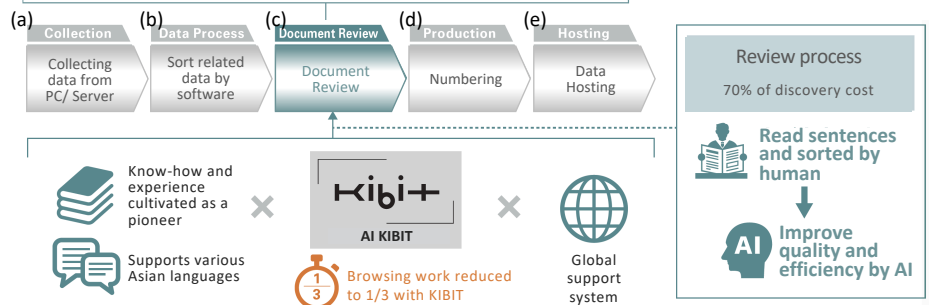
Legal Tech AI is FRONTEO’s founding business in which it chiefly offers discovery support to Japanese companies facing lawsuits in the US. (See next page for US litigation and e-discovery process.) When a lawsuit is filed, both sides disclose information as per the request of plaintiff and defendant, according to discovery regulations. In recent years, dis-

Process of US Civil Lawsuits and E-Discovery

Process of US Civil Lawsuits



Process of E-Discovery



Source: Sessa Partners from company materials

closures have largely consisted of electronic documents, making e-discovery the mainstream method of disclosure. In the US, many lawsuits reach settlement before court hearings, but e-discovery prior to hearings can uncover evidence that is used as a bargaining chip to reach an advantageous settlement.

The e-discovery process breaks down as follows: (a) Evidence is identified and stored, and the data is collected from PCs and servers. (b) The data is processed with software to filter it based on date or keyword. (c) A lawyer reviews the filtered documents. (d) The reviewed data is converted into the designated submission format. (e) The data is hosted on a server until the lawsuit is over. [Steps (a) to (e) correspond to the figure above.]

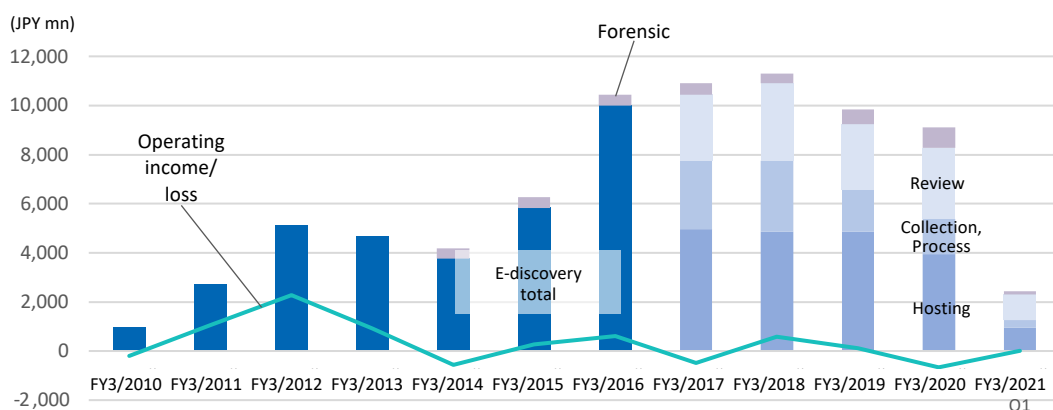
The review process tends to be especially costly. It requires the time and effort of professional attorneys, incurring huge personnel expenses. It generally accounts for about 70% of total discovery fees. But by using FRONTEO’s original AI system KIBIT Automator, the review process can be drastically streamlined. Compared to a human reviewer checking 60 pages/hour, KIBIT Automator can check 430 pages/hour. This not only slashes costs but enhances review quality. Management intends to place even greater focus on expanding sales of KIBIT Automator as its AI service in the Legal Tech AI business.

The figure on the next page shows the earnings trend in the Legal Tech AI business. Revenue peaked in FY3/18 before entering a downtrend. This was chiefly due to the one-off nature of revenue, coupled with large projects delayed or called off (note: hosting can be expected to generate recurring revenue). KIBIT Automator was developed and efforts were poured into AI services, but sales efforts did not necessarily translate to results. However, on a quarterly basis, both revenue and the operating line bottomed in Q2 FY3/20 and has since been on a recovery track. This can be attributed to improved revenue from KIBIT Automator, reduced costs due to restructuring its US subsidiary, and further cost savings owing to delisting from NASDAQ in February 2020.*

Side Note 2

IJJ’s listing in 1999 was a representative example of a Japanese IT firm listing on NASDAQ. But not many followed suit, and those that did later delisted one after another. FRONTEO was the last one left, and it has now delisted. This is symbolic of changes that have occurred in financial markets.

Earnings Trend in Legal Tech AI Business



Note: Company-wide revenue prior to FY3/13. Divided into total e-discovery and forensic revenue between FY3/14 and FY3/16. Divided into each e-discovery service from FY3/17.
 Source: Sessa Partners from company materials

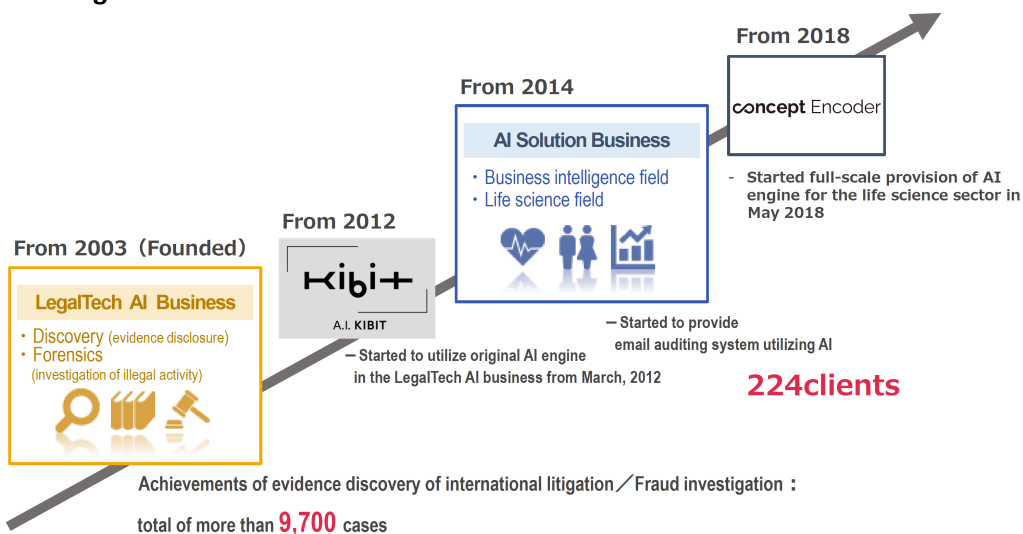
In 2015, the global e-discovery market was worth approx. USD7.2bn. Some sources forecast the market size will reach USD21.0bn in 2022, with 15% implied annual growth, suggesting further room for expansion. That said, e-discovery is a labor-intensive market prone to fierce price competition with the risk of turning into a red ocean. Cost reductions through AI are imperative to secure steady earnings in the e-discovery business.

Region-wise (i.e., by host country), US revenue has exceeded Japan since the acquisition of US companies in 2014 and 2015.

2) AI Solution Business

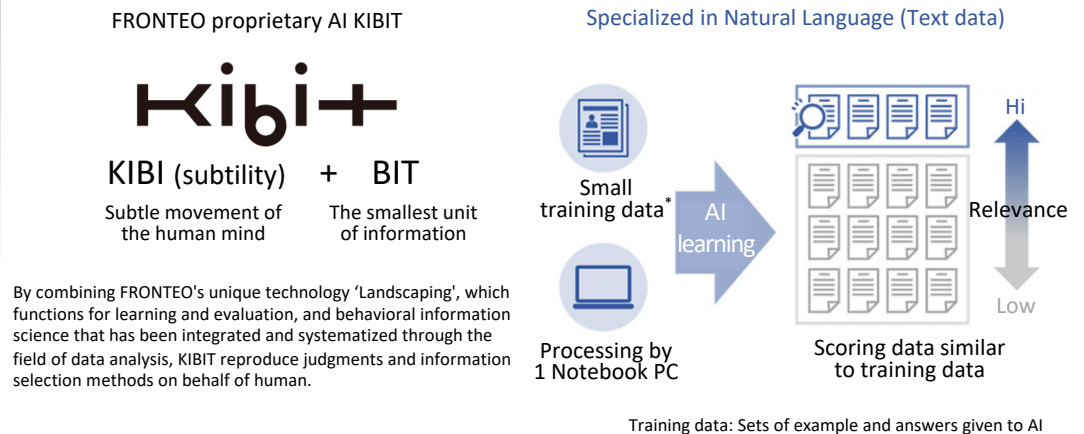
In AI Solution, FRONTEO applies its proprietary AI systems developed in Legal Tech AI to other domains. The company released KIBIT in November 2015. Whereas most marketed AI systems are related to autonomous driving, voice recognition, and image or voice data, FRONTEO leverages its expertise in natural language. It refers to its system as a “micro AI,” which realizes high accuracy with little training data and computing power.

From Legal Tech AI to AI Solution



Source: Company materials

Features of KIBIT



Source: Company materials

Side Note 3

FRONTEO Director and CTO Mr. Hideki Takeda’s original background is in philosophy. FRONTEO’s edge in AI x NLP may in part stem from this, as philosophy is closely tied to linguistics. Mr. Takeda isn’t the only one with a unique background. Many of FRONTEO’s engineers hail from fields other than computer science.

FRONTEO accumulated NLP technology by processing massive volumes of documents in the Legal Tech AI business. While image-related AI systems require a large training data, KIBIT processes documents with a small training data by analyzing linguistic relationships and textual idiosyncrasies. Thus, it offers easy implementation with little computing power.

In the AI Solution business, FRONTEO operates (a) Business Intelligence service (mainly targeting financial and manufacturing customers) and (b) Life Science AI service (mainly targeting medical care and drug discovery customers).

a) Business Intelligence

In the Business Intelligence service, FRONTEO develops and offers applications based on KIBIT (see figure below). A considerable amount of revenue comes through system integrators, and these system integrators and other clients particularly appreciate how KIBIT can be implemented with little training data. Currently, KIBIT is used by over 200 companies, including all three of Japan’s megabanks.

KIBIT’s Applications

Product name	Overview	Implementing Industries
Email Auditor 19	Email monitoring system. Recurrence prevention of fraud, early detection, building an effective compliance structure	Financial institutions, etc.
Patent Explorer 19	Patent investigation support system. Jointly developed with Toyota Technical Development	Manufacturing, etc.
Knowledge Probe 20	Big data analysis support system. Supports creation of business opportunities and risk avoidance	Many industries
Find Answer 19	Automated FAQ system	Many industries
KIBIT G2	2nd-generation AI engine. Improved usability, API connection, faster processing speed through parallel processing	
KIBIT-Connect	Provides KIBIT Engine API	

Note: After implementing KIBIT G2, 19 or 20 was added to the names of the previous four versions
Source: Sessa Partners from company materials

Examples of Companies Using KIBIT Products

Intelligence Cloud Customers						
Knowledge Probe Customers						
						
Email Auditor Customers						
Patent Explorer Customers						
						
						
Find Answer Customers						
KIBIT - Connect Customers						
Kibiro for Biz Customers						
Patent Explorer Business Partner						

Source: Company materials

Financial institutions saved 42% of working time and leveled out operational capacity when they experimented at "FinTech Demonstration Experiments Hub" by FSA. Additionally, KIBIT is estimated to reduce the time spent by medical representatives on daily report checks as per MHLW guidelines by 95%.

b) Life Science AI

(For more details, see ③ Key Topics: Life Science AI Business Strategy)

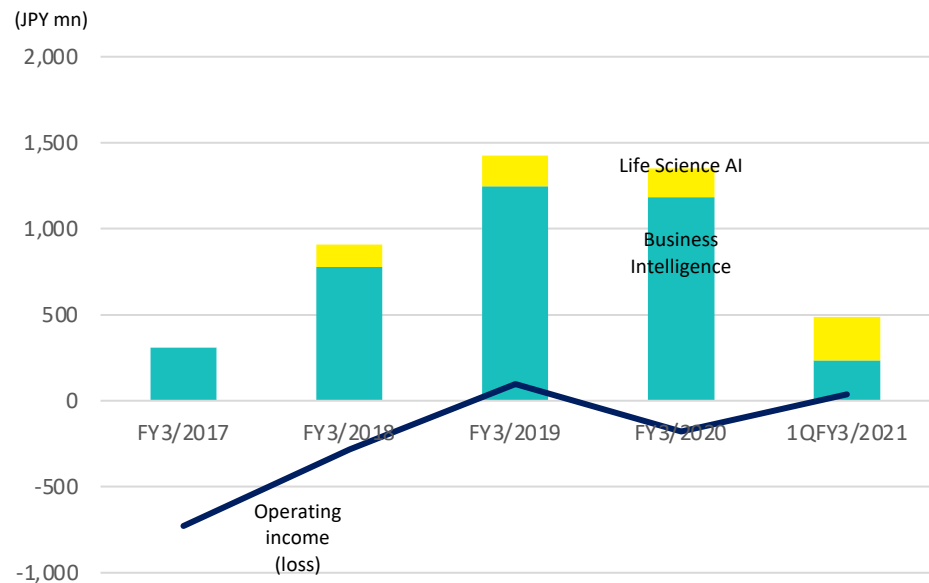
From early on, FRONTEO has focused on life science as an area of AI application. In April 2015, it established UBIC Medical (later named FRONTEO Healthcare and conducted an absorption-type merger in October 2019). In May 2018, it announced an AI specializing in life science called Concept Encoder. Like KIBIT, this AI engine is based on its proprietary NLP technology, and it vectorizes word and text to enable evidence-based medicine (EBM). By virtue of this, Concept Encoder solves a long-standing problem in AI, whereby the process of how a result is reached turns into a black box.

Broadly, Life Science AI breaks down into (i) digital health and (ii) drug discovery domains.

(i) In digital health, FRONTEO offers a usage license for its AI business support devices used in medical care, diagnosis, nursing, and nursing care support. As for the revenue model, the service falls under medical device sales, which are covered by insurance. Currently, FRONTEO is developing a business support device for dementia.

(ii) In drug discovery, FRONTEO offers drug discovery and development support using AI. Based on Concept Encoder, it released Amanogawa (article search AI system) and Cascade-Eye (drug discovery support AI). It has entered a license agreement with Takeda Pharmaceutical and Chugai Pharmaceutical for its drug discovery support AI system. As for the revenue model, it receives license fees and a milestone fee depending on the contract.

Earnings Trends in AI Solution Business



Source: Sessa Partners from company materials

See the figure above for earnings trends in the AI Solution business. While this business is still up-and-coming, annual revenue has already exceeded JPY1.0bn, and a total of 224 companies have implemented its services as of end-June 2020. Earnings expansion is on the horizon should FRONTEO make progress on building awareness of KIBIT in Business Intelligence and on forming partnerships with pharmaceutical companies in Life Science AI. Heavy investment burdens have caused FRONTEO to continue to post losses, but the profit margins are lucrative. Topline growth will likely help stabilize profitability in the future.

LEGAL DISCLAIMER

This report is intended to provide information about the subject company, and it is not intended to solicit or recommend investment. Although the data and information contained in this report have been determined to be reliable, we do not guarantee their authenticity or accuracy.

This report has been prepared by Sessa Partners on behalf of the concerned company for which it has received compensation. Officers and employees of Sessa Partners may be engaged in transactions such as trading in securities issued by the company, or they may have the possibility of doing so in the future. For this reason, the forecasts and information contained in this report may lack objectivity. Sessa Partners assumes no liability for any commercial loss based on use of this report.

The copyright of this report belongs to Sessa Partners. Modification, manipulation, distribution or transmission of this report constitutes copyright infringement and is strictly prohibited.



SESSA Partners Inc.

5-3-18 Hiroo, Shibuya-ku, Tokyo
info@sessapartners.co.jp