

**MEDICAL DATA VISION CO., LTD (3902 JP)**

CLOUD-BASED MDV ACT LAUNCHED FEE-PAYING SERVICES AND INSURANCE PATIENTS DATABASE.

**FY23 Q1 RESULTS SUMMARY**

Medical Data vision [MDV] reported FY23 (Dec year-end) Q1 gross profit [GP] of ¥1,238mil (-1.6% YoY) and recurring profit [RP] of ¥424mil (-7.9% YoY) on sales of ¥1,559mil (+3.2% YoY). The gross profit margin [GPM] continues to contract, declining from 83.3% in FY22 Q1, to 82.4% in FY22 and down to 79.4% in FY23 Q1. This is due to a +27.3% YoY rise in COGS to ¥320mil from 1) higher insurance association data acquisition costs (+¥29mil YoY), and 2) a rise in costs associated with the launch of cloud-based services such as fee-paying MDV Act and Alpha Salus (+¥28mil YoY). In addition, SG&A (personnel) costs rose +7.2% YoY to ¥439mil as (1) the firm took on more engineers and marketing staff, and (2) employees were awarded a +5% pay rise. As a result, despite the YoY increase in sales, RP declined -7.9% YoY.

MDV (3902 JP): Earnings Summary (Cumulative)								
(¥mil)	FY22				FY23			
	Q1	1H	FY	YoY (%)	1Q	YoY (%)	FY CE	YoY (%)
Sales	1,511	2,856	6,104	7.6	1,559	3.2	7,200	17.9
GP	1,259	2,360	5,030	8.3	1,238	-1.7	n/a	n/a
GPM (%)	83.3	82.6	82.4	+0.5ppt	79.4	-3.9ppt	n/a	n/a
SG&A	789	1,575	3,271	7.3	815	3.3	n/a	n/a
SG&A ratio (%)	52.2	55.1	53.6	-0.2ppt	52.3	+0.1ppt	n/a	n/a
OP	470	785	1,758	10.3	423	-9.9	1,800	2.4
OPM (%)	31.1	27.5	28.8	+0.7ppt	27.1	-4.0ppt	25.0	-3.8ppt
RP	461	776	1,750	9.9	424	-7.9	1,800	2.8
RPM (%)	30.5	27.2	28.7	+0.6ppt	27.2	-3.3ppt	25.0	-3.7ppt
NP*	313	522	870	-20.0	275	-12.0	1,200	37.9
Dividend (¥)	n/a	n/a	6.0	7.1	n/a	n/a	6.5	8.3

Source: Nippon-IBR based on MDV's FY21, FY22 & FY23 Q1 earnings results material  
\* NP attributed to the parent's shareholders

**PERFORMANCE BY SEGMENT**

MDV's business portfolio is largely divided into two segments:

**(1) Data Network Services:** The business model has shifted from an on-premises data solutions service to a cloud-based service. FY23 Q1 RP fell -11.3% YoY to ¥199mil on sales of ¥388mil (+4.0% YoY).

Under the on-premises business model, MDV received a one-off installation fee and a monthly subscription fee thereafter from data solutions services such as EVE to DPC hospitals – i.e., those with a Diagnosis Procedure Combination / Per Diem Payment System [DPC / PDPS] fee payment system, hereinafter referred to as DPC – to support their data management needs.

In FY23 Q1, MDV earned stock (recurring) revenue of ¥230mil (+3.6% YoY / +2.2% QoQ) from the on-premises solutions, such as EVE, and one-off initial fees of ¥72mil (+7.5% YoY / +4.3% QoQ).

**EXECUTIVE SUMMARY**

- Medical Data Vision [MDV] reported FY23 (Dec yr-end) Q1 gross profit [GP] of ¥1,238mil (-1.6% YoY) and recurring profit [RP] of ¥424mil (-7.9% YoY) on sales of ¥1,559mil (+3.2% YoY).

- Gross profit margin [GPM] fell from 82.4% in FY22 to 79.4% in FY23 Q1, on a 27.3% YoY rise in COGS to ¥320mil, due to 1) a rise in the cost to acquire insurance association data (+¥29mil YoY), and 2) higher costs for the launch of cloud-based services such as fee-paying MDV Act and Alpha Salus (+¥28mil).

- MDV's FY23 guidance calls for GP of ¥5,555mil (+10.4% YoY) and RP of 1,800mil (+2.8% YoY) on sales of ¥7,200mil (+17.9% YoY). RP growth is much lower due to rising costs (personnel and subcontractors).

- For FY23, MDV's strategic focus will be on 1) the shift to cloud-based services in the Data Network Service segment, 2) maintaining its market share in the medical big data analysis market, and 3) the launch of the remodelled Karteco app to further enhance the growth potential of BtoC businesses.

- MDV is currently running a three-year medium-term management plan that covers FY23~FY25. The final target is for RP of ¥2,500mil+ (CAGR of +16.1%+) on sales of ¥10,000mil (CAGR +16.7%+) solely from organic growth of its existing businesses.

- MDV plans to (1) allocate 5~8% of sales to R&D, (2) add 20~30 new staff every year, and (3) pay 20%+ of net profit as a dividend.

With the promotion of the firm's cloud-based service, MDV Act, the number of hospitals which now subscribe to this service has surpassed the 1,000-mark to reach 1,025 facilities as of FY23 Q1 – an increase of +32 hospitals as of FY22-end. For the full year, the firm hopes to get 1,200 users on board.

As of Q1, the company also received orders for fee-paying services of MDV Act from 315 medical institutions. MDV aims to have 600 fee-paying customers by the end of FY23. The new fee-paying services MDV Act offers are the most used functions under the existing DPC system.

The number of health check facilities that introduced MDV's solutions Alpha Salus, reached 94 facilities vs the FY23 target of 109. Also in this segment, MDV included revenues from new businesses of ¥86mil (+2.4% YoY on a like-for-like basis) in FY23 Q1. However, the majority of revenue from new businesses has been separated out to the Other Services segment from FY23.

Data Network Service New Sales Breakdown (Quarterly) in old segment group							
(¥mil)	FY22				FY23		
	Q1	Q2	Q3	Q4	Q1	YoY (%)	QoQ (%)
Data Network Total	490	480	535	594	535	9.2	-9.9
Flow Revenue (initial fees)	67	67	33	69	72	7.5	4.3
Recurring Revenue (monthly subscription fees)	222	220	221	225	230	3.6	2.2
New Businesses (subsidiaries)	200	192	280	299	233	16.5	-22.1

Source: Nippon-IBR Based on MDV's FY21, FY22 & FY23 Q1 earnings results materials

Data Network Service New Sales Breakdown (Quarterly) in new segment group			
(¥mil)	FY22	FY23	
	Q1	Q1	YoY (%)
Data Network Total	374	388	4.0
Flow Revenue (initial fees)	67	72	7.5
Recurring Revenue (monthly subscription fees)	222	230	3.6
New Businesses (subsidiaries)	84	86	2.4
Other services	116	147	26.6

Source: Nippon-IBR Based on MDV's FY22 & FY23 Q1 earnings results materials

**(2) Data Utilisation Services:** MDV's model for this business focuses on providing various analytical services based on information collected through its Data Network Service solutions. Segment FY23 Q1 GP was ¥916mil (-3.1% YoY) on sales of ¥1,022mil (+0.2% YoY). The GPM decline from FY22 Q1's 92.7%, and FY22's 91.6% to 89.6% in FY23 Q1 on the back of 1) a decline in the number of sales and marketing staff, which subsequently led to lower sales (¥805mil -3.4% YoY / -19.2% QoQ) of ad-hoc Medical Data Survey Analysis, and 2) higher costs related to the surging demand for insurance patients' data – MDV must acquire anonymised insurance associations' data from DeNA and JAST – which subsequently led to a deterioration in the sales mix.

KPIs of this segment include the followings:

- Sales trend of insurance data: This reached ¥70mil in Q1 vs the FY23 target of ¥500mil.
- Sales of the data trial field: This is a powerful tool which helps clinical trials become more efficient. Q1 sales were ¥8mil vs the FY23 target of ¥80mil.
- Numbers of samples in MDV's databases: The amount of data from DPC hospitals stored in MDV's Sakura databank increased to 43.22mil patients, up from 42.32mil as of the end of FY22.
- Number of samples gained through insurance association's data: MDV focuses on increasing the variety of samples by gaining accesses to insurance associations' data through its alliance with DeNA (2432 JP). This rose to 19.11mil in Q1 from 17.97mil patients as of the end of Q4.

Data Utilisation Services: Sales Breakdown by Service (Quarterly: Adjusted to new segment)									
(¥mil)	FY22						FY23		
	Q1	Q2	Q3	Q4	YoY (%)	QoQ (%)	Q1	YoY (%)	QoQ (%)
Data Utilisation Total	1,020	865	935	1,182	2.0	26.4	1,022	0.2	-13.5
MDV analyzer	186	186	176	186	6.3	5.7	217	16.7	16.7
Ad-Hoc	833	678	759	996	1.2	31.2	805	-3.4	-19.2

Source: Nippon-IBR Based on MDV's FY23 Q1 earnings results material

## FY2023 OUTLOOK

MDV's FY23 guidance calls for GP of ¥5,555mil (+10.4% YoY) and RP of 1,800mil (+2.8% YoY) on sales of ¥7,200mil (+17.9% YoY). The RP growth is much lower than that of sales due to higher costs: Of the ¥1,095mil rise expected in absolute sales, COGS will likely rise +¥570mil YoY primarily due to the need to acquire insurance associations' data, and a +¥126mil YoY rise in personnel costs, especially for marketing staff and subcontractor costs (+¥243mil YoY).

In FY22, the firm managed to hire a team of eight IT engineers who have a background in medical and national insurance-related IT system development. MDV's R&D capability will continue to be sufficiently supported with alliance subcontractors.

### Data Network Service

MDV is guiding for Data Network Service GP of ¥850mil on sales of ¥1,584mil [NB: the YoY performance is not valid as the segment's sales breakdown was changed]. Management's two main strategies for growth include: 1) Getting all clients to shift to its cloud-based services, and 2) expanding sales of Alpha Sarus, a cloud-based system for medical exams. We discuss these further below:

#### 1) Shift the client base to the cloud-based services.

FY23 will be a transformation year for the Data Network Service segment. MDV had originally sold on-premises type services, such as EVE, targeting 1,764 DPC hospitals. The aim for FY23 is to shift the entire client base over to the firm's cloud-based service platform, which can be loaded with services such as MDV Act.

One of the basic services MDV Act offers, MDV Act Main Story – a function through which hospitals can observe the list of indicators required for hospital management analysis. – is currently provided for free. However, on the cloud platform, MDV plans to develop several fee-charging services that each client can choose depending on what they need.

Given the legacy system EVE charges a subscription fee of ¥50,000/month, MDV is confident that a similar level can be charged for MDV's first cloud-based package of fee-paying services. The major difference, however, is that the cloud-based service does not charge the initial one-off fee of ¥4mil.

Since MDV Act also targets smaller hospitals, which, in the past, found the initial fee an obstacle, the firm plans to roll out a SaaS model with the cloud-based services. Moreover, having patient data from hospitals that are not DPC hospitals will further enhance the depth and variety of data.

KPIs for the cloud services include: (1) the number of users. In FY23, the firm aims to raise the number of users to 1,200 hospitals from 993 in FY22, and (2) the number of fee-paying customers for MDV Act platform. Of the 1,200 users, MDV aims to monetise 600 users by offering them fee-charging services.

#### 2) Increase the number of medical check facilities that use System Be Alpha's cloud system, Alpha Salus:

In FY22 Q4, segment sales were boosted from the full contribution of the subsidiary's cloud-based online health check data and follow-up service, Alpha Salus, that targets medical check facilities. In FY23, MDV aims to further increase the number of users to 109 facilities from 94 in FY22. By linking Alpha Salus with Karteco, data of healthy people will be added to the Sakura Data Bank, thus providing a larger pool of data.

### Data Utilisation Service

MDV is guiding for FY23 Data Utilisation Service GP of ¥4,014mil (+9.4% YoY) on sales of ¥4,780mil (+19.4% YoY). In this segment, MDV focus is to maintain its market share in this growing medical big data analysis market. In addition to data from DPC hospitals, MDV can now add data from insurance associations and medical check facilities. The firm is also working in alliance with DeNA and JAST as they have access to insurance associations' data. However, the change in sales mix due to the sourcing of data from the insurance associations, will likely lead to a decline in segment GPM from the previous level of over 90% to a figure above 80%.

### BtoC Services

MDV plans to launch a BtoC service, the Karteco app, which was renewed for practicality and usability by patients. The ultimate goal of Karteco is to offer preventive medicine information to patients by enabling them to access to their own medical records and medical check results. A user of Karteco can readily access their health data, book online triage consultations – the service will direct the patient to an appropriate medical care provider – and use specialised sensing technology to obtain vital data, such as take a pulse, check respiratory count, and the general state of one's sympathetic and parasympathetic nervous system.

MDV plans to introduce a subscription model in the Karteco services. Initially, the firm considered building a blockchain, with Karteco being a part of it. However, for the time being, Karteco itself can function as a versatile app through which patients can access data and purchase goods and services. Revenue will be derived from 1) a monthly subscription fee and, 2) commission payments from service providers who gain customers via Karteco.

Although the firm aims to roll out the service in FY23, any potential earnings from the Karteco service is not currently included in the FY23 guidance. Focusing on the BtoC business growth signifies that MDV's business model shifted from gathering data to using the data to launch various data and evidence-based preventative medicine services to consumer.

Earnings Guidance						
(¥mil)	FY20	FY21	FY22		FY23 CE	
	FY	FY	FY	YoY (%)	FY CE	YoY (%)
Sales	4,579	5,672	6,104	7.6	7,200	17.9
OP	1,146	1,594	1,758	10.3	1,800	2.4
RP	1,148	1,592	1,750	9.9	1,800	2.8
RPM (%)	25.1	28.1	28.7	+0.6ppt	25.0	-3.7ppt
NP*	700	1,087	870	-20.0	1,200	37.9
Dividend (¥)	3.6	5.6	6.0	7.1	6.5	8.3

Source: Nippon-IBR based on MDV's FY21 & FY22 earnings results material  
\* NP attributed to the parent's shareholders

## THE FY23-FY25 MEDIUM-TERM MANAGEMENT PLAN

MDV announced its first medium-term management plan that covers the three years from FY23~FY25. The final year target calls for RP of ¥2,500mil+ (CAGR of +16.1%+) on sales of ¥10,000mil (CAGR of +16.7%+), solely from organic growth of the firm's existing businesses. During the three years between FY20~FY22, the firm enjoyed CAGR of approx. +15~16% while investing on developing cloud systems, increasing subsidiaries, proactively forming alliances with companies in other sectors such as SBI Holdings (8473 JP) and DeNA (2432 JP)'s insurance subsidiaries, and hiring engineers.

MDV set KPI for both segments during the plan's three-year tenure. Those KPIs are:

- **Data Network Service KPI:** Aim to get the number of hospitals that deploy the cloud-based services to exceed 1,200 sites and to promote Alpha Salus, a cloud-based health check data system, to 300 health check centres.
- **Data Utilisation Service KPI:** Maintaining sales CAGR of +16%. Currently, MDV has a market share of 32%. Some 80% of the medical big data analysis service is generated from providing services to pharmaceutical companies. To capture growth, MDV plans to tap the insurer data analysis market by obtaining an extra data from the alliance with DeNA.

During the medium-term plan, MDV aims to plant steppingstones for long-term growth while solidifying its existing businesses. The firm reckons that the numerical target can be achieved by the following three strategies:

- **Shifting to a cloud-based database and promoting health checks to enhance the variety of data:** Management sees the need for these existing services to become cloud-based as an important step to develop further solutions. As such, MDV's Sakura Databank is fully cloud-based, enabling its services to have data links with other service providers and create new services. The firm is expanding its customer base from hospitals to associated health check centres which cater for individuals. By linking the health check information to Karteco, an information interface that is used by individuals, MDV will extend its services to BtoC.
- **Maintaining market share in the evidence-based medicine [EBM] data market:** According to Fuji Keizai Group's report "*Current state and the future prospects of medical AI and medical big data markets 2022*", the part of medical big data market that MDV's Data Utilisation services target is estimated to grow to ¥19,000mil (+13.5% CAGR over the three years) in Japan in 2025, from an estimated market size of ¥13,000mil in 2022. To maintain its 30~40% market share, the firm will need to expand its Data Utilisation services not only to pharmaceutical companies but to insurance firms, and potentially to overseas customers as well.
- **Investing on healthcare BtoC data businesses:** MDV sees the next growth area to be the healthcare BtoC business. In 2015, MDV started providing its personal health record [PHR] service Karteco, an app which can be used by patients for free to access their health records. Under the medium-term management plan, the firm will redefine Karteco and launch the health check data and vital data analysis services which will form important parts of the preventive medicine and healthcare markets.

According to Fuji Keizai Group's report "*Trends in the data health planning, health management, and PHR-related market and cutting-edge health insurance, 2021*", the health check data, vital data and lifestyle data analysis markets together have an estimated size of ¥13,170mil, which is estimated to grow to ¥16,070mil (CAGR of +6.9% over three years).

Although MDV's exposure to this market is currently marginal, the firm aims to monetise Karteco through a subscription model and potentially increase ARPU per user by connecting various services to the Karteco platform. However, any potential revenue from Karteco is currently not included in the next medium-term plan.

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## GROWTH INVESTMENTS AND SHAREHOLDER RETURN

There are primarily three areas to which the firm's financial resources will be allocated:

- 1) **Human resources:** MDV plans to hire 20~30 new staff members every year between FY23~FY25. Management think it is crucial to hire engineers to realise the medical data infrastructure that will be attractive for other companies to participate in. The firm does not limit the human resources by nationality, gender and age and tries to hire those with a variety of skills and expertise.
- 2) **R&D:** MDV plans to spend approx. 5~8% of sales every year on R&D and will concentrate funds on MDV Act and health check system-related fields during FY23~FY24.
- 3) **Shareholder returns:** MDV's shareholders return policy offers an annual dividend pay-out ratio of 20%+. Over the past two fiscal years, the firm also implemented share buybacks (¥589mil in FY20 / ¥889mil in FY21) which generated total shareholder returns of +104.5% and +101.8%, respectively. In FY23, the firm plans to pay an annual dividend of ¥6.50/share and maintain a pay-out of approx. 20%+ of net profit. For the medium-term plan, MDV has not yet detailed its shareholder return policy.

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