

November 5, 2018

### SATO HOLDINGS CORPORATION

FY2018 1H Financial Results (Six Months Ended September 30, 2018)

Securities Code: 6287

### **Summary of Apr-Sep FY2018**

Consolidated sales increased while OI jumped YoY.

Auto-ID Solutions business ► Performed satisfactorily.

Overseas: Recovery momentum continued in real terms.

Japan : Continuous drive on internal measures bore fruit

amid a favorable business environment.

IDP business ► R&D progressed largely as planned.

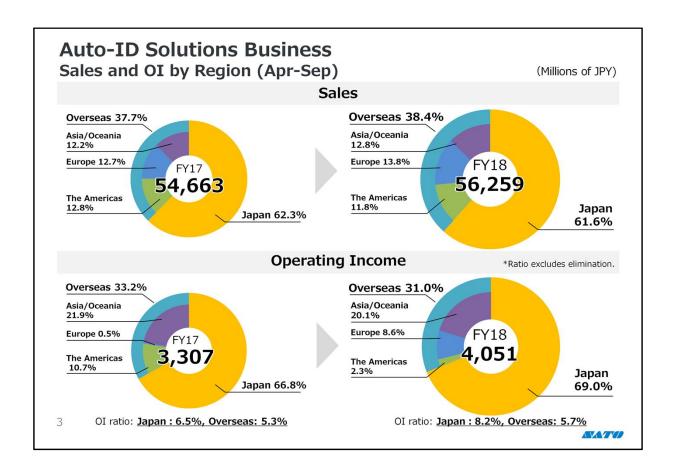
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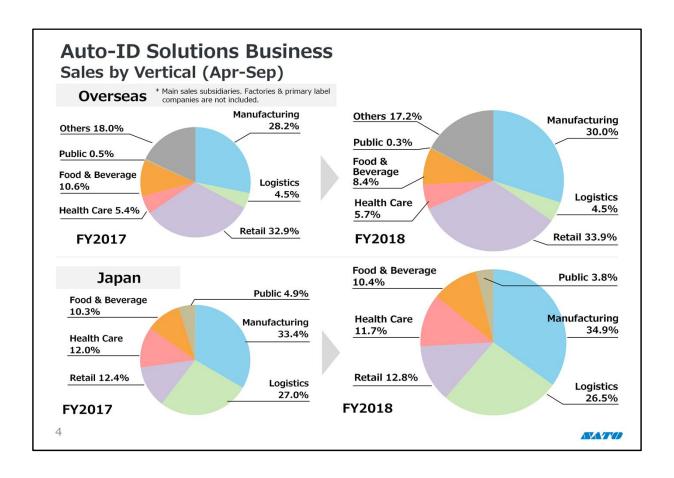
- On a consolidated basis, sales increased and OI jumped YoY.
- By business segment, Auto-ID Solutions performed satisfactorily.
- The Overseas Business maintained its recovery momentum while profitability in Japan recorded massive improvement driven by a favorable business environment and continuous internal measures.
- R&D in the IDP Business progressed largely as planned.

|                       |                     | (Millions of JP |        |                 |        |  |  |
|-----------------------|---------------------|-----------------|--------|-----------------|--------|--|--|
|                       |                     | FY2018          | YoY    | excl. FX impact |        |  |  |
| Auto-ID               | Total Sales         | 56,259          | 54,663 | 102.9%          | 104.3% |  |  |
| Solutions<br>business | Operating<br>Income | 4,051           | 3,307  | 122.5%          | 125.9% |  |  |
|                       | Total Sales         | 21,597          | 20,604 | 104.8%          | 108.69 |  |  |
| Overseas              | Operating<br>Income | 1,220           | 1,099  | 111.0%          | 112.9% |  |  |
|                       | Total Sales         | 34,661          | 34,058 | 101.8%          | 101.89 |  |  |
| Japan                 | Operating Income    | 2,831           | 2,208  | 128.2%          | 132.49 |  |  |
|                       | Total Sales         | 230             | 160    | 143.8%          | 141.0% |  |  |
| IDP business          | Operating<br>Income | -676            | -745   |                 | -      |  |  |
| Consolidated          | Total Sales         | 56,489          | 54,823 | 103.0%          | 104.49 |  |  |
| (incl. eliminations)  | Operating Income    | 3,343           | 2,556  | 130.8%          | 135.8% |  |  |

- Consolidated sales increased by 1.7 billion yen (3%) while OI jumped 800 million yen (30.8%).
- Within the Auto-ID Solutions Business, overseas saw increases in sales and OI through growth despite adverse FX impact but failed to meet targets.
- On the other hand, Japan saw increases in sales and OI while meeting targets at the same time.
- IDP increased sales by growing its existing business while reducing operating loss through cost reduction after reviewing the scope of its R&D projects.



- The key point in sales composition is that overseas ratio expanded due to higher sales in Asia/Oceania and Europe.
- Overseas, Europe expanded as sales subsidiaries together with Okil conducting Primary Labels business in Russia booked a combined sales increase of 800 million yen.
- On the other hand, the Americas shrunk, lacking figures from the large order in FY17 that was worth 400 million yen.
- The key point in OI composition is that Europe expanded with an OI increase of 300 million yen on back of sales growth.
- The Americas saw a sizable shrinkage owing to the lack of the aforementioned large order in FY17 and increase in R&D costs.
- Overseas and Japan both performed well as a whole, but Japan expanded through massive improvements in profitability.



- Overseas sales in food & beverage shrunk due to the aforementioned lack of figures from the large order in FY17 that had come from a large fast food chain in the Americas.
- In Japan, logistics shrunk by 0.5 percentage points as consumable sales in September decreased steeply YoY impacted by earthquake and typhoons.

### **Consolidated Results (Apr-Sep)**

(Millions of JPY)

|   | FY2018 |
|---|--------|
| Net Sales                                 | 56,489 |
| Operating Income                          | 3,343  |
| Operating Income %                        | 5.9%   |
| Ordinary Income                           | 3,190  |
| Profit attributable to owners of parent*1 | 1,919  |
| Effective Tax Rate*2                      | 39.3%  |
| EBITDA*3                                  | 6,096  |

| FY2017 | Change - |        |
|--------|----------|--------|
| F12017 | Change   | YoY    |
| 54,823 | +1,665   | 103.0% |
| 2,556  | +787     | 130.8% |
| 4.7%   | +1.3pt   |        |
| 2,369  | +821     | 134.7% |
| 2,413  | -493     | 79.6%  |
| 43.4%  | -4.1pt   |        |
| 5,318  | +778     | 114.6% |

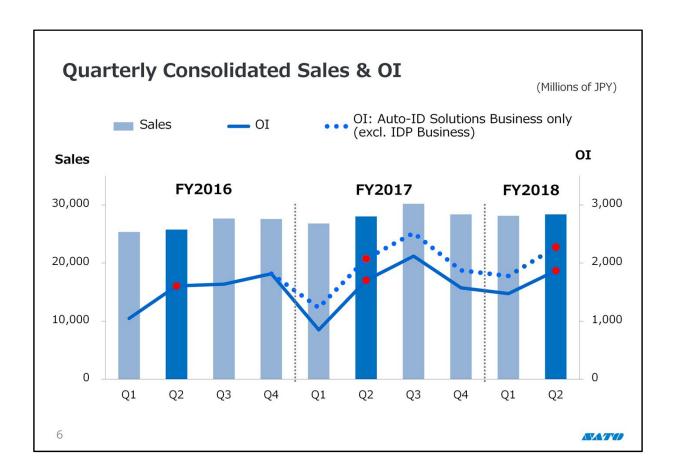
Average exchange rates (Apr-Sep): FY18: JPY 110.26/USD, JPY 129.78/EUR, FY17: JPY 111.04/USD, JPY 126.31/EUR FX sensitivity for FY18: JPY +435 million in sales and JPY -11 million in OI, for +1 JPY against USD and assuming all others move by the same ratio

Apr-Sep FY17: JPY 2.097 million Apr-Sep FY17: JPY 664 million (incl.305 mil. for DataLase)

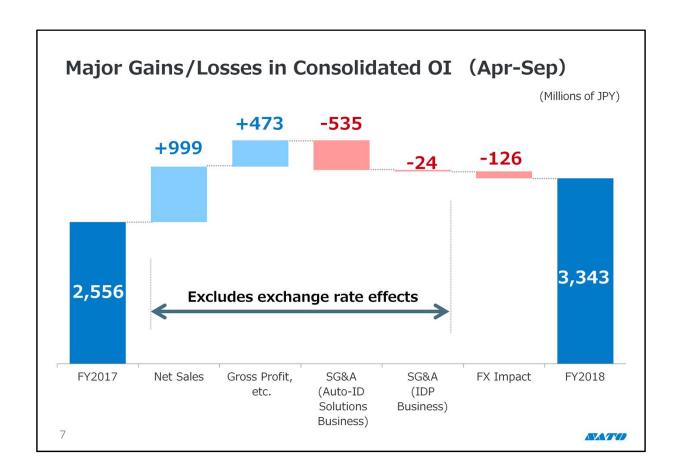


- Consolidated sales increased by 1.7 billion yen YoY.
- Gross profit increased by 1.2 billion yen, of which 300 million yen came from the overseas business, 800 from Japan and 100 from IDP.
- As a result, operating and ordinary incomes grew in terms of both amount and ratio.
- Net profit decreased by 500 million yen due to extraordinary profits booked in FY17.

<sup>·</sup>Amortization for Apr-Sep FY18: JPY 566 million (incl. 312 mil. for DataLase)



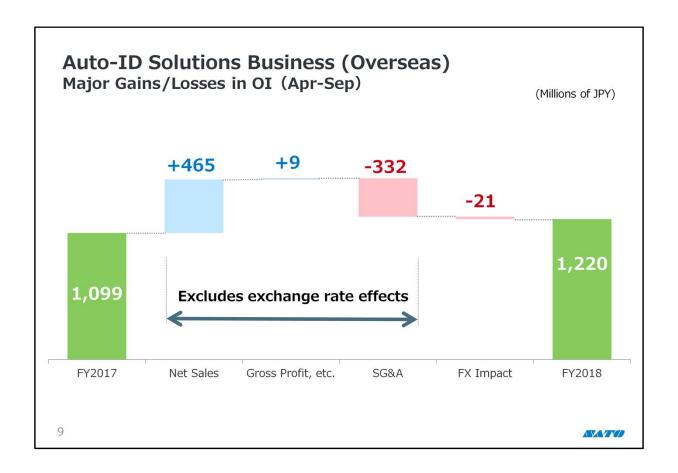
 Auto-ID Solutions Business, which does not include IDP, increased sales and OI in both Q1 and Q2 YoY respectively.



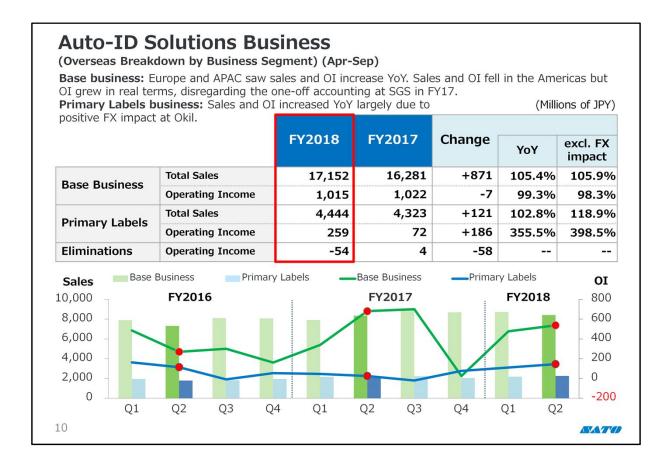
- Of the net sales gains making up the OI increase YoY, overseas contributed 500 million yen through increased sales in Europe and Asia/Oceania while Japan contributed roughly the same amount.
- The 1.5 percentage point improvement in gross profit margin in Japan was the main contributor to the gross profit gains.
- The SG&A in Auto-ID Solutions Business increased due to the rise in HR costs in Japan and sales-related cost increases overseas.

#### Auto-ID Solutions Business (Overseas) (Apr-Sep) Recovery momentum continued in real terms. (Millions of JPY) FY2018 FY2017 Change excl. FX YoY impact **Total Sales** 20,604 +992 104.8% 108.6% 21,597 Gross Profit 8,057 7,797 +260 103.3% Gross Profit % 37.3% 37.8% -0.5pt 112.9% Operating Income 1,099 +120111.0% 1,220 Operating Income % 5.3% 5.7% +0.3ptSales Sales OI OI FY2017 FY2018 FY2016 12,000 1,200 10,000 1,000 8,000 800 6,000 600 4,000 400 2,000 200 0 0 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 8 AVATO

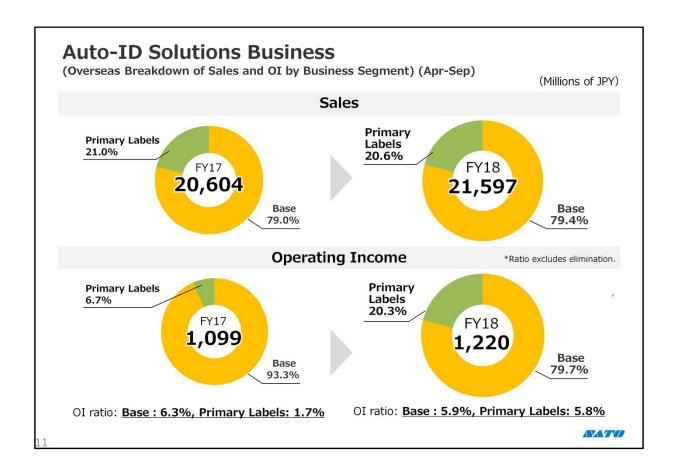
- Overseas sales increased by 1 billion yen (5%) while OI grew by 100 million yen (11%).
- Gross profit increased by 300 million yen despite the margin dropping by 0.5 percentage points while OI margin improved by 0.3 percentage points.



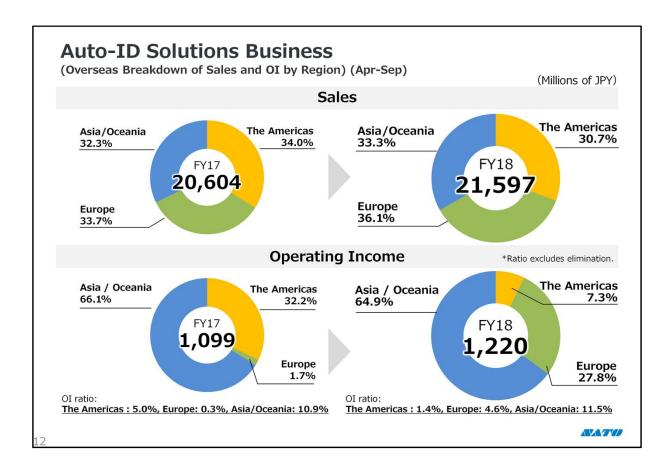
- Sales subsidiaries in Germany and Asia/Oceania along with Okil conducting Primary Labels business were the main contributors to the net sales gains making up the OI increase YoY.
- Gross profit recorded tiny gains of 9 million yen with balanced positives and negatives.
- SG&A increased due to sales-related cost increase and a one-off factor regarding the FY17 R&D booking at SGS (SATO Global Solutions) in North America.



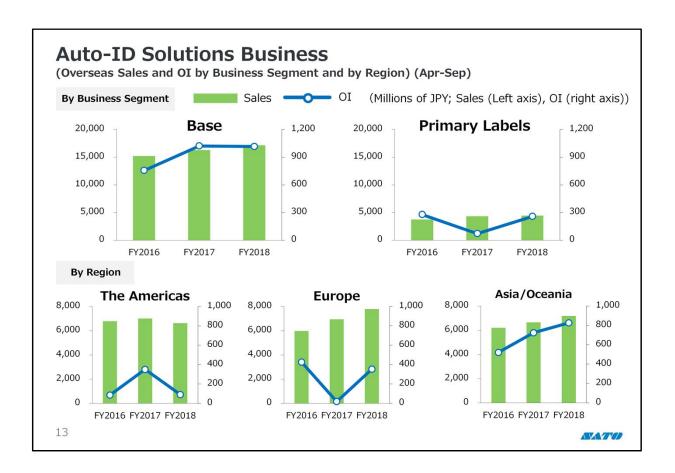
- Base Business in Europe and Asia/Oceania increased sales and OI.
- Business in the Americas reduced sales and OI, but if we exclude the aforementioned one-off factor at SGS, we see that OI had increased.
- OI in Base Business declined by 7 million yen, but increased by 200 million yen excluding the SGS factor.
- Primary Labels increased sales and OI as a whole. Achernar in Argentina and Prakolar in Brazil reduced sales and OI due to macroeconomics and FX impact but Okil in Russia increased sales and OI.
- The 54 million yen loss in eliminations was due mainly to unrealized gains of inventories.



- The sales composition of Base Business in Auto-ID Solutions overseas expanded due to faster growth compared to Primary Labels.
- There has been a massive shift in OI composition as OI declined in Base Business while increasing in Primary Labels.



- Sales and OI composition by region in Auto-ID Solutions overseas saw notable change in ratio that the Americas contribute.
- The decline in sales ratio was due to the lack of a large order that had boosted figures in FY17 and a temporary slowdown of business with a major customer in North America, along with FX and macroeconomic impacts in South America.
- The decline in OI ratio was due to the aforementioned one-off factor at SGS.



- The slowdown of sales and OI in Base Business in 1H came mainly from the Americas.
- The growth in Primary Labels can largely be attributed to Okil being grouped in Europe.

#### **Auto-ID Solutions Business** (Overseas Breakdown by Region: The Americas) (Apr-Sep) Base business: Sales decreased YoY due mainly to a slowdown in demand from a major SAL client, while OI fell as R&D expenses at SGS were booked to Japan in FY17. Disregarding the one-off accounting, OI increased in real terms. Primary Labels business: Adverse macroeconomic trends and one-off, high-margin sales in (Millions of JPY) FY17 at Prakolar translated to decreases in sales and OI YoY. FY2017 FY2018 Change excl. FX YoY impact **Total Sales** 5,679 **Base Business** -184 5,495 96.8% 99.6% -170 **Operating Income** 49 219 22.5% 28.0% -193 **Primary Labels Total Sales** 1,130 1,324 85.4% 111.8% Achernar **Operating Income** 43 133 -89 32.8% 39.5% Prakolar Base Business Primary Labels Base Business ---Primary Labels Sales OT 4,000 400 FY2017 FY2016 FY2018 3,000 200 2,000 0 1,000 -200 -400 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 14 AVATO

- Base Business in the Americas consists of SAL (SATO America, LLC.) and SGS in North America, sales subsidiaries in South America, and Achernar and Prakolar conducting Primary Labels businesses.
- SAL reduced sales by 500 million yen due to the large order factor that had boosted figures in FY17 and a temporary slowdown of business with a major customer. SGS reduced OI as R&D costs were booked in Japan in FY17, but should we disregard the one-off accounting, OI increased in real terms.
- SAL increased sales and OI, excluding impact from the large order in FY17.

| *X-Pack: A Russian subsidiary owned 60% by SATO Holdings. Produces and sells shrink sleeves, in-mould labels and soft packages.  Total Sales Operating Income Primary Labels Okil X-Pack*  Departing Income Operating Income Operat |                        |                           |             |              |          | (1*1111       | ions of JPY |
|--|------------------------|---------------------------|-------------|--------------|----------|---------------|-------------|
| Holdings Produces and sells shrink sleeves, in-mould labels and soft packages.   | *X-Pack: A Russian sub | sidiary owned 60% by SATO | FY2018      | FY2017       | Change [ |               | evel EV     |
| Primary Labels   Operating Income   139   78   +60   177.3%   173.4%   |                        |                           |             |              |          | YoY           |             |
| Operating Income         139         78         +60         177.3%         173.4%           Primary Labels Okil X-Pack*         Total Sales         3,314         2,999         +314         110.5%         122.0%           Sales         Base Business         Primary Labels         Base Business         Primary Labels         OI           150         100         50         50  | Basa Businasa          | Total Sales               | 4,475 3,949 |              | +526     | 113.3%        | 110.4%      |
| Okil X-Pack* Operating Income 215 -60 +275   | base business          | Operating Income          | 139         | 78           | +60      | 177.3%        | 173.4%      |
| X-Pack*   Operating Income   215   -60   +275  | Primary Labels         | Total Sales               | 3,314       | 2,999        | +314     | 110.5%        | 122.0%      |
| FY2016 FY2017 FY2018 150 100 50  | · X-Pack*              | Operating Income          | 215         | -60          | +275     |               |             |
| FY2016 FY2017 FY2018 150 100 50  | - Page I               | Pusiness — Primar         | a. Labola   | Paca Businer | 20       | riman (Labole |             |
| 2,000<br>1,500   | Sales                  |                           | y Labeis (  | Base Busines | SS — P   | rimary Labeis | 01          |
| 1,500  | 2,500                  | FY2016                    | 1           | FY2017       |          | FY2018        | 150         |
|  | 2,000 -                |                           |             |              |          |               | - 100       |
| 1,000 -  | 1 500                  |                           |             |              |          |               | - 50        |
|  | 1,500                  |                           |             |              |          | _             |             |
| 500 -  | 1,000                  |                           |             | •            | /        |               | - 0         |
|  | 2,000                  | FY2016                    |             | FY2017       |          | FY2018        | -           |
|  | 1,000                  |                           |             |              |          |               |             |

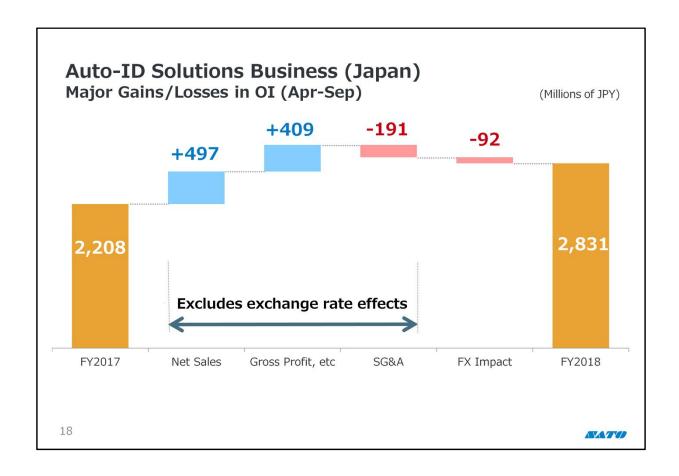
- Although quarterly results were mixed as Q1 saw sales increase at all sales subsidiaries and OI increase except in France while Q2 saw sales increase in all subsidiaries except UK and OI decline at all of them, Base business in Europe increased sales and OI in 1H.
- In Primary Labels, Okil increased sales and OI. 70% of the 300 million yen sales increase was due to favorable FX impact.

#### **Auto-ID Solutions Business** (Overseas Breakdown by Region: Asia/Oceania) (Apr-Sep) Base business: China and India saw robust performances. Business in India turned profitable. Transition from selling products to providing solutions progressed thanks to an improved mindset in the region to sell solutions. (Millions of JPY) FY2018 FY2017 Change excl. FX YoY impact **Total Sales** 7,181 6,652 +529 108.0% 108.5% **Base Business** Operating +102 827 724 114.1% 111.5% Income Sales \_OI OI Sales FY2016 FY2017 FY2018 4,000 800 3,000 600 2,000 400 200 1,000 0 0 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 16 AVATO

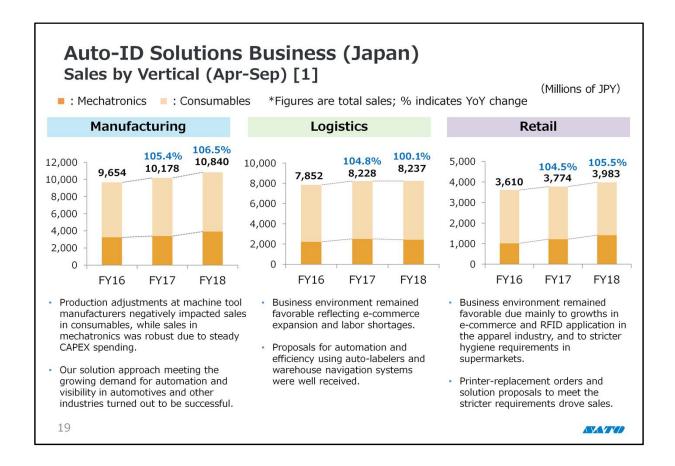
- In Asia, China and India performed well. India managed to turn from red to black ink.
- The business in Asia as a whole is shifting from selling single products to providing solutions.

| 13,217<br>21,443 | FY2017<br>12,920   | Change<br>+297                            | YoY  |
|------------------|--|---|--|
| - A              | and the second s | +207                                      |  |
|                  | 21,138   | +305                                      | 102.3%<br>101.4%   |
| 34,661           | 34,058   | +602                                      | 101.8%   |
| 17,269<br>49.8%  | 16,455<br>48.3%  | +814<br>+1.5pt                            | 105.0%   |
| 2,831            | 2,208  | +623                                      | 128.2%   |
| 8.2%             | 6.5%   | +1.7pt                                    |  |
| I                | FY2017   | FY2018                                    | <b>OI</b> 2,000  |
|                  |  |   | - 1,500  |
|                  |  |   | 1,000  |
|                  |  |   | 1,00   |
|                  | 17,269<br>49.8%<br><b>2,831</b>  | 17,269 16,455 48.3% 2,831 2,208 8.2% 6.5% | 17,269 16,455 +814 +1.5pt 49.8% 48.3% +11.5pt 2,831 2,208 +623 8.2% 6.5% +11.7pt |

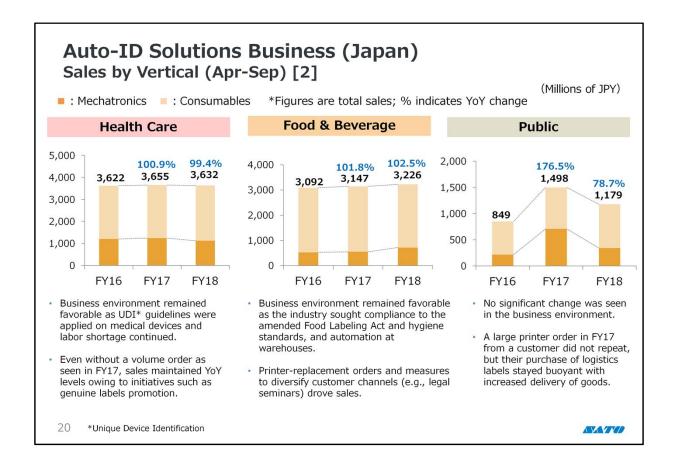
- Both the mechatronics and consumables sales in Japan performed well.
- Gross profit margin improved in both categories to see a composite gain of 1.5 percentage points and a combined increase of 800 million yen.
- As a result, OI margin improved by 1.7 percentage points to reach 8.2%.



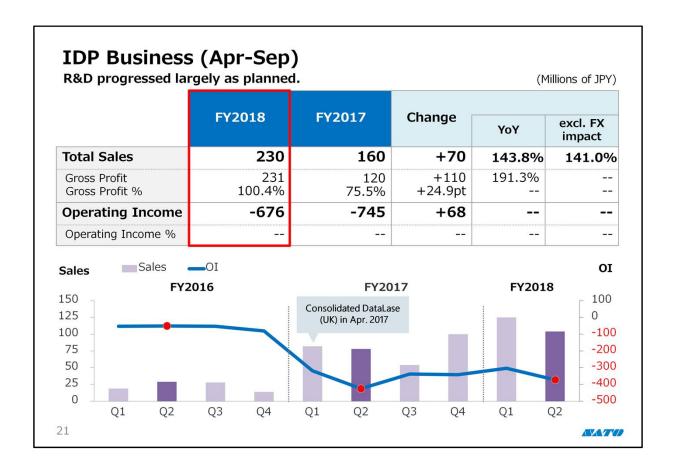
- Of the net sales gains making up the OI increase YoY, 70% came from domestic initiatives while the rest come from exports to overseas subsidiaries.
- The gross profit margin improvement of 1.5 percentage points contributed to gross profit gains.
- SG&A increased mainly due to rise in HR costs.
- There was a negative FX impact of 92 million yen after netting out the impacts from importing mechatronics products from factories and exporting them to subsidiaries.



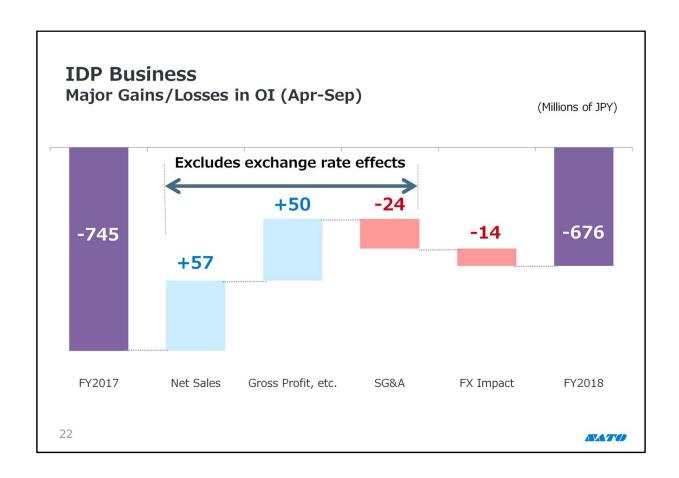
- Both the mechatronics and consumables sales in manufacturing performed well especially in the automotive industry. With more electrification in this sector, traceability control is shifting from lot units to individual parts. This has resulted in more solutions business in the manufacturing process.
- Sales in logistics declined due to a special mechatronics order in FY17. The number of solutions business is increasing on back of ecommerce expansion and labor shortage, resulting in the size of each deal becoming larger.
- Consumables sales in logistics declined by 4% YoY due to natural disasters.
- Mechatronics sales in retail increased by 16% as orders from convenience stores rose and apparel customers expanded warehouses to cope with higher volumes in e-commerce. Solutions business is increasing in retail as well.



- In health care, consumables sales were steady but mechatronics sales declined as seasonality became even more evident. As such, we are hoping to do better in 2H.
- Various changes are taking place in the health care sector on back of stronger requirements to deal with labor shortage and to provide patient safety. Large business negotiations to be closed 1 or 2 years ahead are progressing in multiple areas such as medicine, medical equipment and specimens.
- In food & beverage, replacement demand for printers is expected in FY18 and FY19. There is surfacing need to comply with regulations such as HACCP and Food Labeling Act by all accounts including food processing companies, wholesalers and supermarkets.
- In addition, our business is helped by existing traceability requirements and efficiency inquiries mainly from beverage warehouses.
- Sales and OI in the public sector increased, if we factor out the special order in FY17. For this sector, it is important that we secure large orders that would monetize 2 to 3 years in the future rather than accumulating small ones.
- The number of solutions negotiations is increasing across the board and each one is expanding in order size with longer lead times, which can pose challenges. A closer look at these negotiations suggests that they are mostly for FY19 onwards rather than FY18.



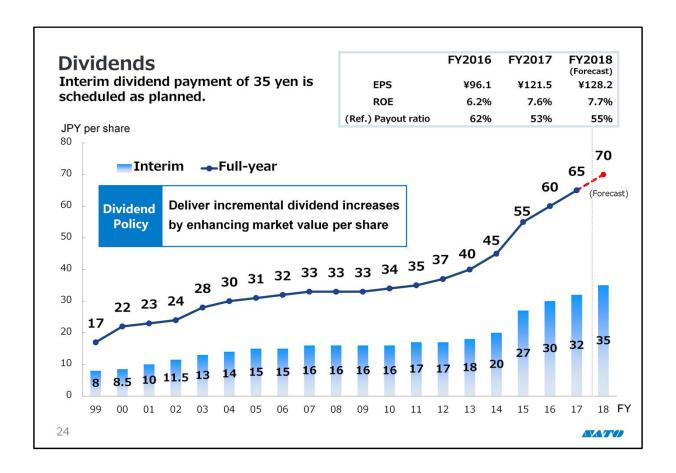
- IDP increased sales by growing its existing business.
- Costs have been contained by reviewing the scope of R&D projects.
   It should be stressed that R&D itself is progressing as planned.
- Gross profit margin is at 100.4% due to the fact that some inventories were booked as cost of sales in FY17 and their sales were booked with no cost in Q1 FY18. Accounting has normalized since Q2.



- The breakdown of YoY operating loss decreases is as shown.
- A Japanese person with a wealth of knowledge in lasers and chemical materials has been appointed to the Chairman post mid-November at DataLase, the company at the core of our IDP Business. The appointment enables us to further strengthen the management, R&D control and collaboration with headquarters.

| FY2018 Consolidated Forecasts                               |                         |                            |                   | (Mill             | ions of JPY)   |                |  |
|---|-------------------------|----------------------------|-------------------|-------------------|--|----------------|--|
|   | 1H                      |                            | 2H                | 2Н                |  | Full Year      |  |
|   | Forecast                | YoY                        | Forecast          | YoY               | Forecast*  | YoY            |  |
| Net Sales   | 56,489                  | 489 103.0% 60,510 103.3% 1 |                   |                   |  | 103.2%         |  |
| Operating Income  | 3 343 13110% 4 /30 113  |                            |                   | 115.2%            | <b>7,600</b> (7,300)   | 121.6%         |  |
| Ordinary<br>Income  | 3,190                   | 134.7%                     | 134.7% 4,209 119. |                   | <b>7,400</b> (7,100)   | 125.7%         |  |
| Profit attributable<br>to owners of<br>parent               | 1,919                   | 79.6%                      | 2,380             | 143.2%            | 4,300<br>(4,100)   | 105.5%         |  |
|   | <reference></reference> |                            |                   |                   |  |                |  |
| EBITDA**  | 11,814                  | ←FY2017 f                  | ←FY2017 full year |                   |  | 112.6%         |  |
| *Figures in parentheses are fo<br>**EBITDA=Operating Income |                         |                            |                   | tes for Apr-Sep F | ast: JPY 110/USD, JPY<br>(18: JPY 110.26/USD, 3<br>: JPY 110.85/USD, J | JPY 129.78/EUR |  |

- Consolidated forecasts for FY18 have been revised following the progress made in 1H.
- Sales have been revised downward by 3 billion yen from 120 to 117 billion. OI has been revised upward by 0.3 billion yen from 7.3 to 7.6 billion. Please refer to the table shown for the revisions in ordinary and net profits.
- Sales forecast in Japan remains the same. The revision overseas includes expected negative FX impact of 1.6 billion yen and reflects a review on our Base Businesses in the pipeline, mostly in the Americas.
- A new organization structure is in place in Japan following the consolidation of group companies at the beginning of FY18, and R&D was decided to be conducted ever more strategically. As such, the OI revision reflects higher related costs in 2H.
- If the revised targets are achieved, record highs seen in sales will be seen in OI as well, at 7.6 billion yen exceeding the previous mark at 7.4 in FY14.



- Interim dividend payment of 35 yen is scheduled as planned and the full year payment is forecasted to be 70.
- As a new management structure started in FY18, we have focused on infiltrating new management policies and the mid-term plan, namely initiatives to share the same goals. I myself am visiting all of the overseas sales subsidiaries. The aim is (1) to collaborate with a sense of unity and bring success by maximizing our strengths, and (2) to let group members fully understand the growth strategy and action plans of each subsidiary so that they could be executed with speed.
- I am confident that our mindset is steadily changing for the better with a firmer-than-ever foundation for growth.



### SATO Terminologies (1/4)

|   | SATO-unique business concepts/initiatives  | Description   |
|---|--|---|
| 1 | Auto-ID Solutions business   | Our business that carries out DCS & Labeling +One. It is specifically about integrating barcode printers/labels, software and services designed in-house and products from partners to resolve customers' worksite issues. It involves matching data with people and things by tagging them with variable information. It breaks down into Overseas and Japan businesses. The latter is made up of Base and Primary Labels businesses.  |
| 2 | Auto-ID Solutions business<br>overseas: Base business and<br>Primary Labels business | The overseas segment of our Auto-ID Solutions business is made up of Base business (tagging variable information at worksites) and Primary Labels business (handles fixed information, i.e., labels on products such as beverages and everyday goods.) The Primary Labels business consists of Achernar (Argentina), Prakolar (Brazil), Okil (Russia) and X-Pack (Russia).  |
| 3 | IDP business   | Develops, manufactures and sells special materials used mainly in Inline Digital Printing. A reporting segment established new in FY 2017 as "Materials business", it was renamed to "IDP business" in FY 2018 to reflect our focus on IDP technology.  |
| 4 | Tagging  | The physical process of attaching identifier data to things and people. SATO is committed to tagging a diverse range of objects handled by different businesses, drawing upon a wealth of practical, technical know-how in Auto-ID solutions backed by <i>Genbaryoku</i> .  |
| 5 | DCS & Labeling +One<br>(DCS: Data Collection<br>Systems)                             | SATO's business model based on a) the systematic collection of data on people and things at business sites and b) tagging/labeling of information, using accurate, efficient and optimized solutions that incorporate Auto-IC technology such as barcodes and RFID with barcode printers and labels/labeling services.  In line with increasingly sophisticated user needs, SATO also pursues a policy of open innovation and partnerships to provide value-added "+One" technologies such as voice recognition and location tracking to its legacy business model to deliver greater customer value. |
| 6 | Matching data with people and things   | Connecting people and things at customer sites with information. Ever since our days of pioneering in hand labelers that tagged price information to products, this concept has remained central to SATO's business.  |
| 7 | Genbaryoku   | Our core competency of going to customer sites to understand their operations and identify the essence of issues to offer optimized solutions.  |

# SATO Terminologies (2/4)

|   | SATO-unique business<br>concepts/initiatives | Description   |
|---|--|---|
| 8 | Teiho  | Teiho is SATO's unique system of reports and proposals in effect since 1976. Employees share new information and ideas they come across on-site every day to top management via the Teiho system.  Teiho helps top management gain immediate insight into the internal/external business situation to facilitate quick decision-making and execution of initiatives, while allowing "participation by all" in the management of the company.  As Teiho involves all employees regardless of rank or years of service, it is also an effective means of compliance monitoring to prevent malpractice and other inappropriate behavior and assist in corporate governance. Some of our global offices have also started Teiho, with more to follow. |
|   | Products, services, technologies             | Description   |
| 1 | Mechatronics                                 | All products not consumables, including hardware (e.g., barcode printers, automatic labelers, scanners, hand labelers), software and maintenance services. They generate higher gross profit margin than consumables. Printers are manufactured in Malaysia, Vietnam and Taiwan.  |
| 2 | Consumables                                  | "Consumable" products such as printer labels/tags, primary labels (product labels) and ribbons. They generate lower gross profit margin than mechatronics, but incur low SG&A expenses as they are typically sold through repeat business.  |
| 3 | Auto-ID Solutions                            | Combination of products such as barcode printers, labels, software and maintenance services using Auto-ID technologies to connect people, things and information.  To meet ever complex and diverse user needs, SATO also looks beyond its own resources and interests to pursue open partnerships, for example, to enable solutions combining Auto-ID and location technologies to track items by tags and inventory/worker movements in real time for managing manufacturing processes and visualizing productivity on-site.  |
| 4 | CLNX series                                  | SATO's first universal printer released worldwide in 2014 (2015 for the Japan market). Engineered for zero downtime, the CLNX series is built to be strong, simple to operate and ready for use with SOS (SATO Online Services), the industry's first IoT maintenance platform for printers.  |
| 5 | SOS (SATO Online<br>Services)                | A cloud-based monitoring service for printers that enables preventative maintenance and on-the-spot troubleshooting.  With SOS, users can view the status of their cloud-connected printers at a glance and manage them centrally with ease, while SATO can increase productivity of its service personnel through preventative maintenance and improve responsiveness over widely spread areas outside Japan with limited service teams.   |

# SATO Terminologies (3/4)

| Pr | oducts, services, technologies           | Description  |
|----|--|--|
| 6  | AEP (Application Enabled Printing)       | Intelligence (i.e. label/tag printing application installed) inside the printer to enable PC-less printing. AEP-enabled printers also support communication with host databases or IT systems.   |
| 7  | API (Application Programming Interface)  | A set of programming instructions and standards that allows applications to communicate with each other and exchange data, making it easier to create applications across a wide variety of platforms, devices, and programming languages.   |
| 8  | Variable information labels              | Blank or pre-printed labels used to print variable elements such as barcode, product price, manufactured or expiry date on-demand at the customer's site of operations. Unlike fixed information labels that are identical and printed at large quantities in a single run, variable information labels offer flexibility to print whenever and wherever needed.   |
| 9  | RFID (Radio Frequency<br>Identification) | A type of Auto-ID technology that uses radio waves to read/write data from/to an RFID tag without making contact. RFID offers faster read rates (from reading multiple tags at the same time) and greater read range than traditional barcode technology. Also, unlike barcodes, RFID tags can be read when covered by another object or stained, and are read/write-capable to enable updates to the encoded data. Because of these key benefits, RFID can significantly improve operational efficiency.  |
| 10 | IDP (Inline Digital Printing)            | A revolutionary, direct marking technology comprised of a special color-change pigment that can be applied as a coating to virtually any substrate and exposed to a laser beam to create a color change.  As IDP uses no ink or labels at the point of printing, it eliminates the need for labels, minimizes stock keeping units (SKUs) and reduces waste, while also shortening time spent on hardware maintenance. Besides delivering cost savings, productivity improvements and environmental benefits, IDP allows the printing of vanible data for late stage customization/personalization of products and packaging, making it ideal for real-time, consumer-directed marketing. Joint development with Xerox for multi-color capability – crucial for marketing applications – currently underway with target commercialization in FY 2021. |

# SATO Terminologies (4/4)

| Key | acquisitions since 2012                            | Description  |
|-----|--|--|
| 1   | Argox Information Co., Ltd. (Taiwan)               | [2012] Company engaging in the development, production and sales of entry level printers.  |
| 2   | Achernar S.A. (Argentina)                          | [2012] Company specializing in primary labels.   |
| 3   | Magellan Technology Pty<br>Ltd. (Australia)        | [2013] Company from which SATO acquired its healthcare business for PJM (Phase Jitter Modulation), a highly unique RFID technology that can quickly and accurately identify large volumes of tagged items stacked or stored in any physical orientation even in the presence of metals and liquids. Now SATO Vicinity Pty Ltd. |
| 4   | Okil-Holding, JSC (Russia)                         | [2014] Primary label company in which SATO acquired 75% ownership stake.   |
| 5   | Prakolar Rótulos<br>Autoadesivos LTDA.<br>(Brazil) | [2015] Company specializing in primary labels.   |
| 6   | DataLase Ltd. (UK)                                 | [2017] Company engaging in the development, production and sales of the Inline Digital Printing color-change pigment and related products. Now a SATO consolidated subsidiary.   |





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