

# SATO HOLDINGS CORPORATION

FY2017

Financial Results (Fiscal Year Ended March 31, 2018)

Securities Code: 6287

I. FY2017 Consolidated Financial Results
II. New Medium-term Management Plan
III. FY2018 Consolidated Financial Targets

Appendix



### I. FY2017 Consolidated Financial Results



### Summary of FY2017

Consolidated sales and OI increased YoY, while OI ratio fell due to OI losses at some overseas subsidiaries.

Auto-ID Solutions business > Achieved record-high full-year OI

Japan : Successfully established a sustainable revenue base. Overseas: Increased sales and OI to maintain a recovery momentum despite some soft spots.

# Materials business ► Partial delays in R&D resulted in less costs than planned.

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### Sales and OI by Business Segment

		FY2017	FY2016	YoY	excl. FX impact
Auto-ID Solutions	Total Sales	113,068	106,210	106.5%	104.5%
business	Operating Income	7,697	6,221	123.7%	121.4%
	Total Sales	70,482	67,283	104.8%	104.8%
Japan	Operating Income	5,831	4,571	127.5%	126.7%
	Total Sales	42,585	38,926	109.4%	104.0%
Overseas	Operating Income	1,865	1,650	113.1%	106.7%
	Total Sales	315	92	342.6%	342.6%
Materials business	Operating Income	-1,426	-240		
Consolidated	Total Sales	113,383	106,302	106.7%	104.7%
(incl. eliminations)	Operating Income	6,249	6,104	102.4%	100.1 <b>%</b>



### **Consolidated Results**

	FY2017	FY2016	Change		
	F12017	F12010	Change	YoY	
Net Sales	113,383	106,302	+7,081	106.7%	
<b>Operating Income</b>	6,249	6,104	+144	102.4%	
Operating Income %	5.5%	5.7%	-0.2pt		
Ordinary Income	5,888	5,426	+462	108.5%	
Profit attributable to owners of parent	4,074	3,221	+853	126.5%	
Effective Tax Rate <sup>*1</sup>	39.5%	39.9%	-0.5pt		
EBITDA*2	11,814	11,296	+518	104.6%	

Average exchange rates for FY17: JPY 110.85/USD, JPY 129.65/EUR FY16: JPY 108.34/USD, JPY 118.74/EUR

\*1 Effective Tax Rate: Remained high due to additional goodwill impairment at Argox and losses incurred at DataLase and few other group companies

\*2 EBITDA = Operating Income + Depreciation + Amortization

•Depreciation for FY17: JPY 4,307 million

•Amortization for FY17: JPY 1,258 million (incl. 625 mil. for DataLase)

FY16: JPY 3,996 million FY16: JPY 1,195 million

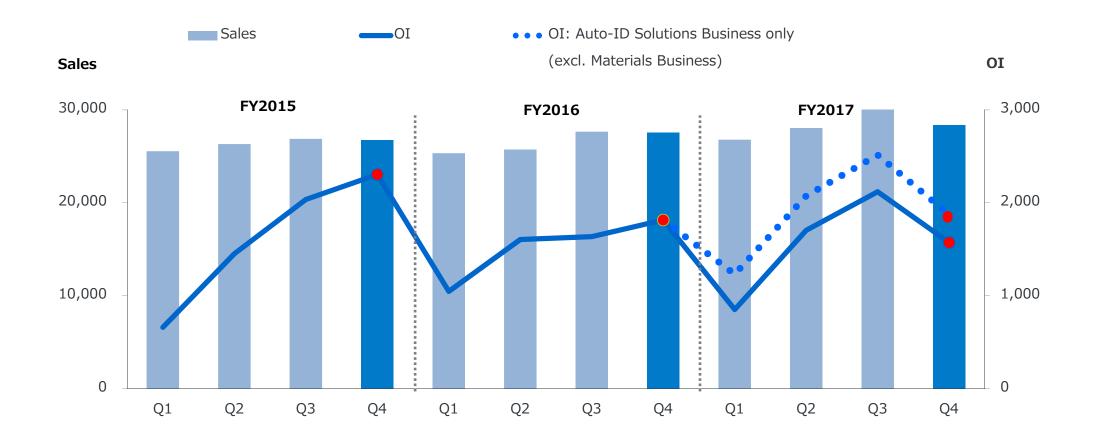


### **Extraordinary Income and Losses**

		Major factors
Extraordinary income	2,835	
Gain on sales of non-current assets	2,835	Former head office building, Malaysia factory
Extraordinary losses	2,229	
Restructuring loss	929	SATO Global Solutions (SGS), SpeciaLase
Impairment loss	656	Argox, SGS
Provision for loss on guarantees	350	RFID-related business partner
Loss on sales of non-current assets	171	Dormitory for Japan employees
Loss on retirement of non-current assets	122	Overseas manufacturing facility

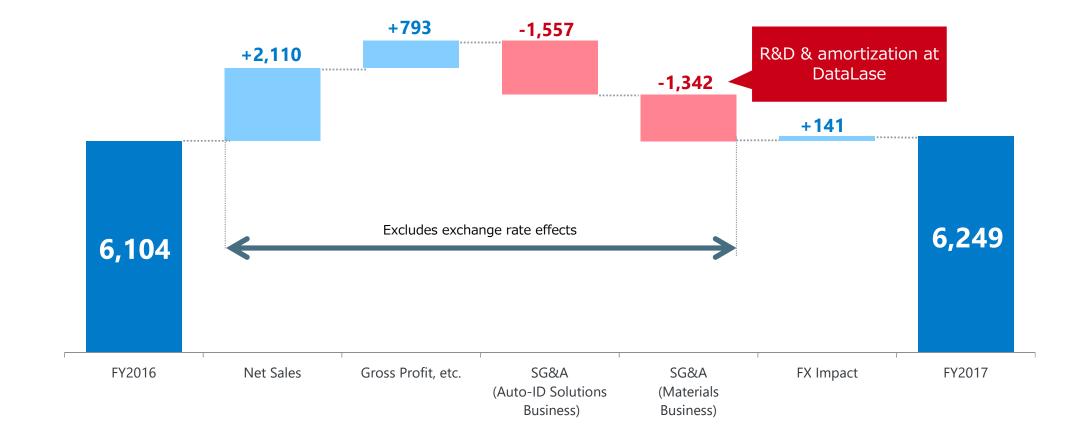


### **Quarterly Consolidated Sales & OI**





### **Major Gains/Losses in Consolidated OI**

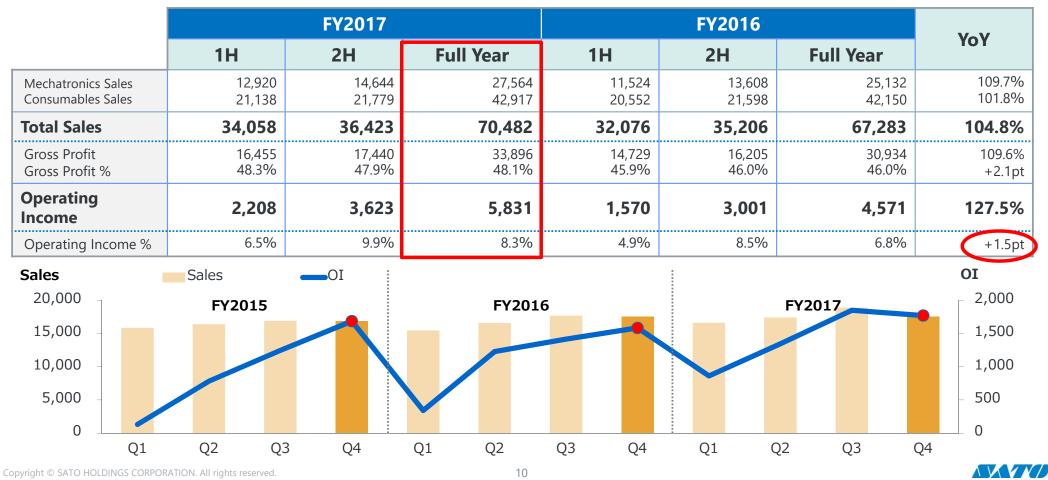




### **Auto-ID Solutions Business (Japan)**

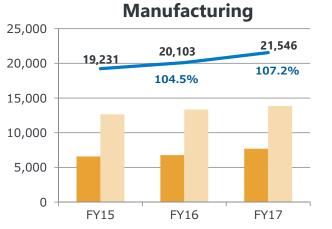
Positive trends in all verticals led to increases in sales and OI.

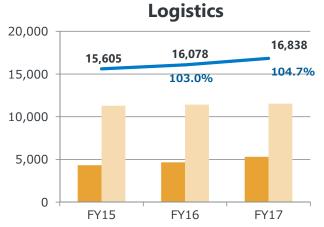
OI ratio improved by 1.5 percentage points YoY due mainly to favorable performance in mechatronics sales.



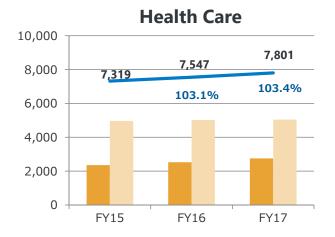
### **Auto-ID Solutions Business (Japan): Sales by Vertical**

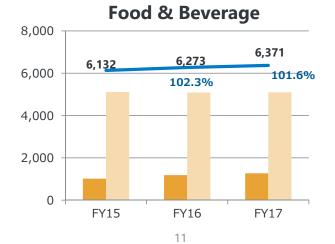
E: Mechatronics : Consumables ----- : Total (% indicating YoY change)

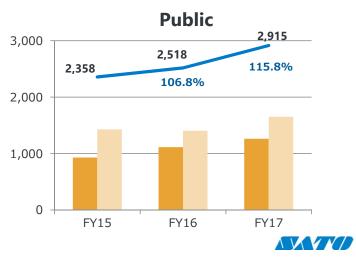




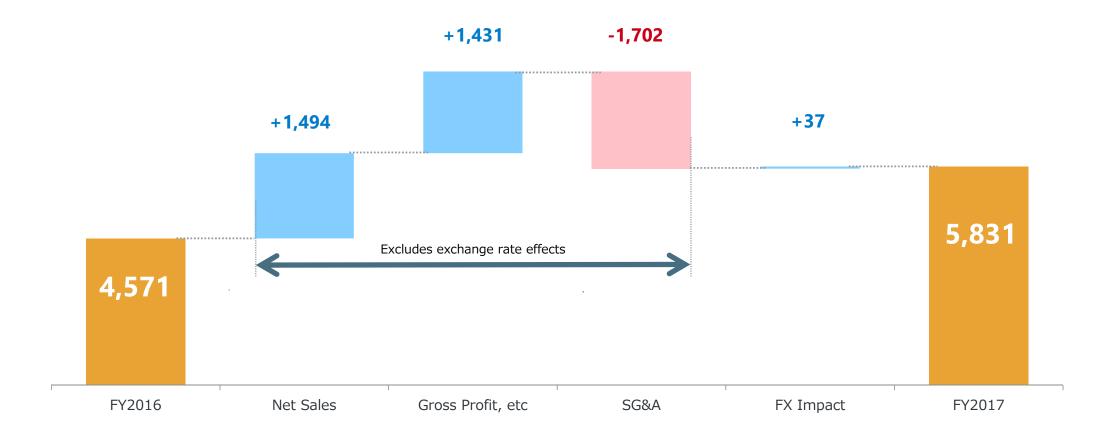








### Auto-ID Solutions Business – Japan (Major Gains/Losses in OI)

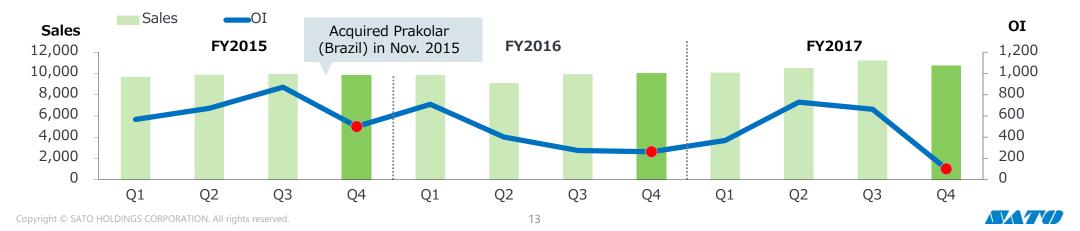




### **Auto-ID Solutions Business (Overseas)**

Although some challenges remain, strong performance in Base business made up for the struggling Primary Labels business, resulting in YoY increases overall in sales and OI.

		FY2017			FY2016	ΥοΥ		
	1H	2Н	Full Year	1H	2H	Full Year		excl. FX impact
Total Sales	20,604	21,980	42,585	18,957	19,969	38,926	109.4%	104.0%
Gross Profit Gross Profit %	7,797 37.8%	8,056 36.7%	15,853 37.2%	7,310 38.6%	7,414 37.1%	14,724 37.8%	107.7% -0.6pt	 
Operating Income	1,099	766	1,865	1,112	538	1,650	113.1%	106.7%
Operating Income %	5.3%	3.5%	4.4%	5.9%	2.7%	4.2%	+0.1pt	



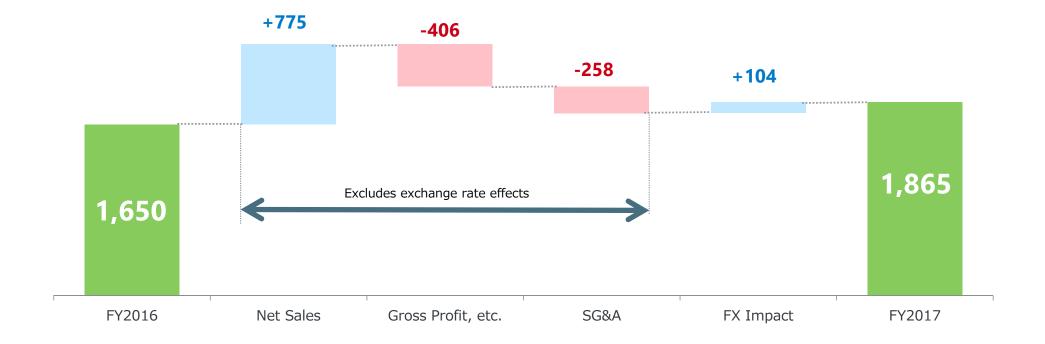
### **Auto-ID Solutions Business (Overseas Breakdown)**

Base business: The Americas and APAC saw YoY increases in sales and OI, while Europe increased sales but fell behind in OI. Primary Labels business: Okil saw a fall in YoY OI due to negative FX impact and investment costs for ramping up production canabilities to expand business

capabilities to expand business.			FY2017			FY2016		Yo	Ŷ
		1H	2H	Full Year	1H	2H	Full Year		excl. FX impact
Base Business	Total Sales	16,281	17,683	33,964	15,217	16,193	31,411	108.1%	103.3%
	Operating Income	1,022	726	1,749	756	464	1,221	143.3%	134.9%
Primary	Total Sales	4,323	4,297	8,620	3,739	3,776	7,515	114.7%	107.0%
Labels	Operating Income	72	58	131	279	45	325	40.3%	39.7%
Eliminations	Operating Income	4	-19	-15	76	27	103		



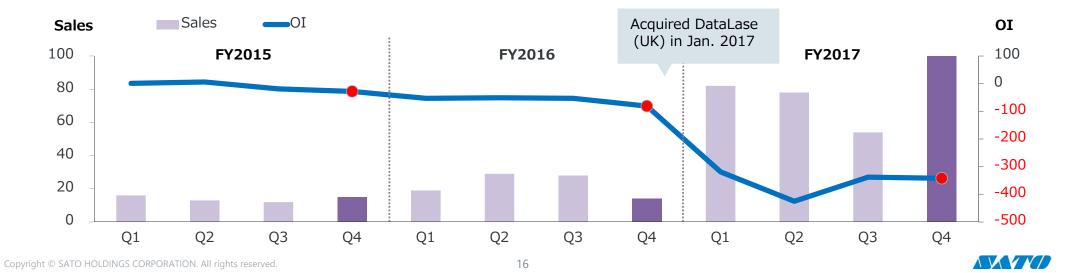
### Auto-ID Solutions Business – Overseas (Major Gains/Losses in OI)



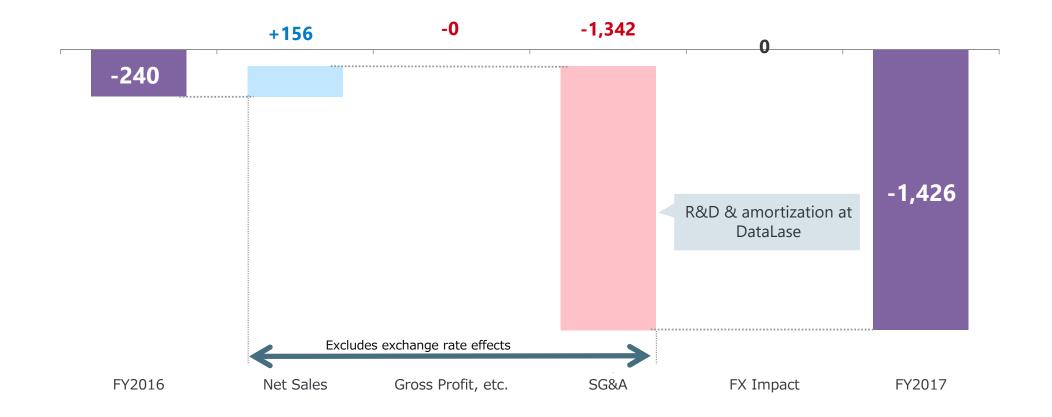
### **Materials Business**

Partial delays in R&D at DataLase (consolidated FY2017) resulted in less costs than planned.

	FY2017 FY2016						VeV	
	1H	2H	Full Year	1H	2H	Full Year	r YoY	
Total Sales	160	155	315	48	43	92	342.6%	
Gross Profit Gross Profit %	120 75.5%	113 73.3%	234 74.4%	7 15.1%	71 165.4%	78 85.5%	298.3% -11.1pt	
Operating Income	-745	-681	-1,426	-104	-135	-240		
Operating Income %								



### Materials Business (Major Gains/Losses in OI)



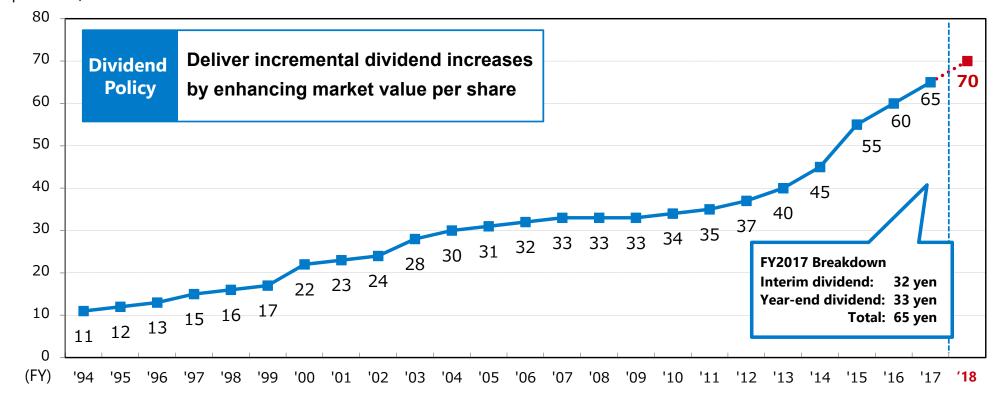




Dividends		FY2016	FY2017	FY2018 (Forecast)
Total dividends for FY2017: JPY 65 (5-yen increase YoY)	EPS	¥96.1	¥121.5	¥122.3
<ul> <li>Total dividends planned for FY2018: JPY 70 (5-yen increase YoY)</li> </ul>	ROE	6.2%	7.6%	7.4%
	(Ref.) Payout ratio	62%	53%	57%

### (Ref.) Payout ratio 62% 53%

#### (JPY per share)



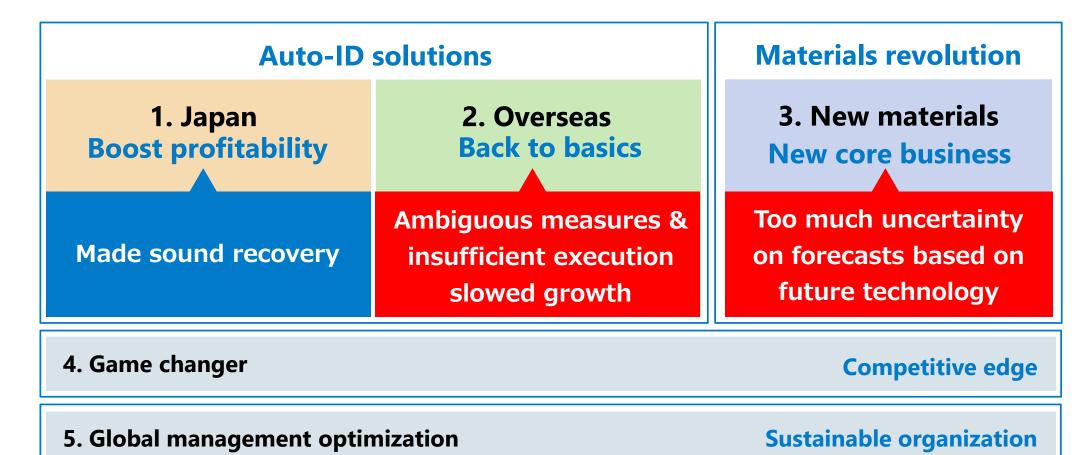
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## II. New Medium-term Management Plan

### Understanding the New Medium-term Management Plan



### **Review of the Previous Medium-term Management Plan**





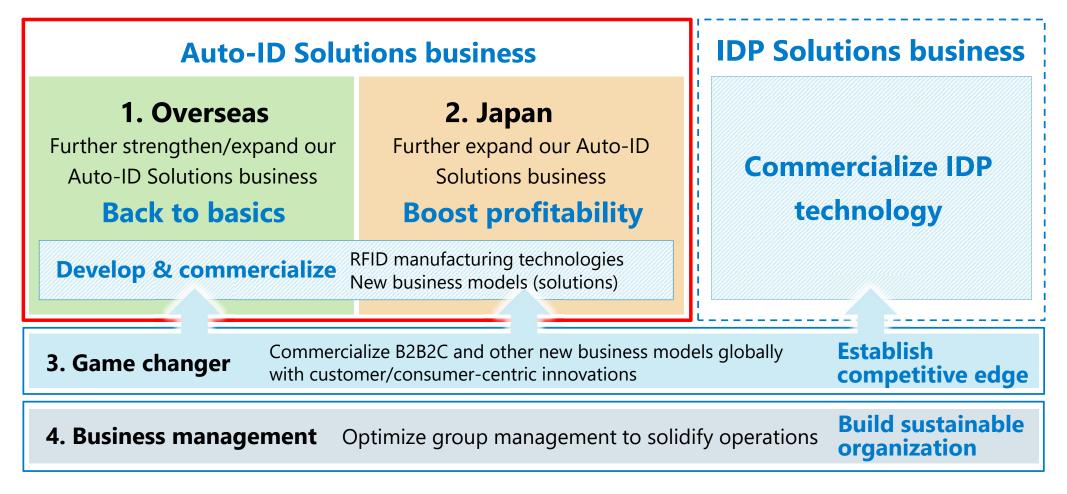
**Management Policy** 

### **Concentrate resources on**

# the Auto-ID solutions business and establish sustainable growth and stable profits



### **Changes in the New Medium-term Management Plan**





### **Management Objectives**

	FY2017	FY2018	FY2019	FY2020	<b>Gap</b> (FY20 vs FY17)	FY2025
Net Sales	113,383	120,000	126,000	135,000	<b>6.0%</b> *1	Net Sales
Overseas %	37.8%	39.9%	41.6%	<b>43.6</b> %	+5.8pt	JPY 200,000 million
OI %	5.5%	6.1%	7.4%	<b>9.5</b> %	+4.0pt	Operating Income JPY 24,000 million
EBITDA %	10.4%	10.8%	12.0%	13.3%	+2.9pt	Operating Income %
ROE	7.6%	7.4%	9.5%	12.0%	+4.4pt	12%
Per capita productivity <sup>*2</sup>	1.84	1.90	2.10	2.50	<b>10.7%</b> *1	
*1 CAGR				2.30		

\*1 CAGR

\*2 Per capita productivity = (Operating income + Goodwill amortization + IT system depreciation) / No. of employees



### **Targets by Segment**

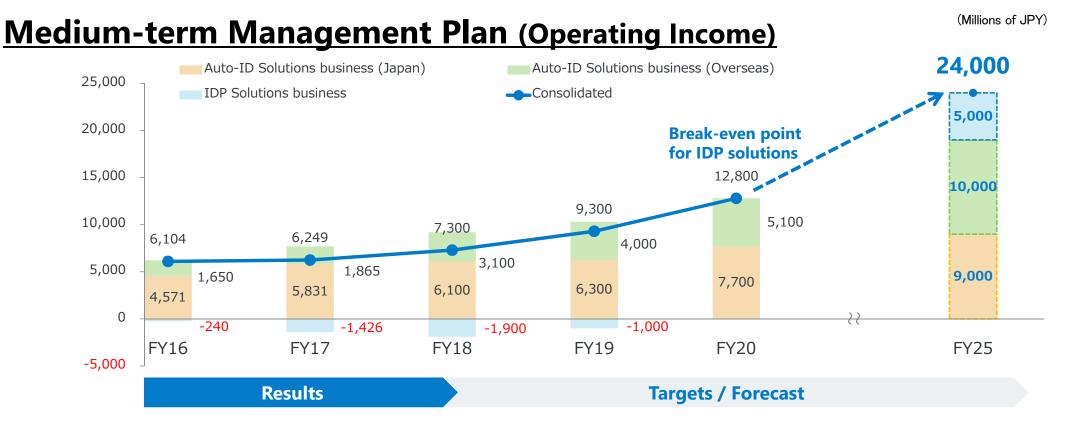
(Millions of JPY)

	FY2017	FY2018 (target)	FY2019 (target)	FY2020 (target)
<b>1. Auto-ID Solutions</b>	business (Overse	eas)		
Sales	42,585	47,500	51,500	55,700
Operating Income	1,865	3,100	4,000	5,100
2. Auto-ID Solutions	business (Japan)			
Sales	70,482	72,000	73,500	76,000
Operating Income	5,831	6,100	6,300	7,700
3. IDP Solutions busin	ness <sup>*1</sup>			
Sales	315	500	1,000	3,300
Operating Income	-1,426	-1,900	-1,000	0
Consolidated				
Sales	113,383	120,000	126,000	135,000
Operating Income	6,249 <sup>*2</sup>	7,300	9,300	12,800
Operating Income %	5.5%	6.1%	7.4%	9.5%
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\*2 Include eliminations

### What to Expect in Consolidated Operating Income

- Pursue sustainable OI growth by concentrating resources on the Auto-ID solutions business and by firmly monetizing abundant business opportunities
- Plan OI for the IDP solutions business based on technologies that can be commercialized



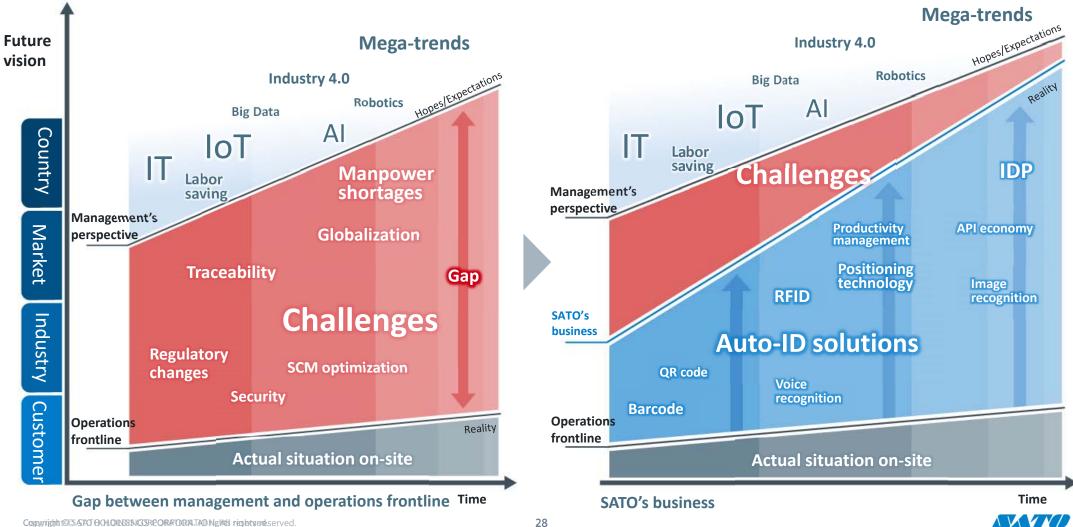
**Growth Strategies** 

1. Grow and evolve the Auto-ID Solutions business

- 2. Create and expand business through global alliances
- 3. Commercialize IDP technology-based solutions



### 1-(1) Potential to Solving Challenges with Auto-ID Solutions



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### 1-(2) Grow and evolve the Auto-ID Solutions business

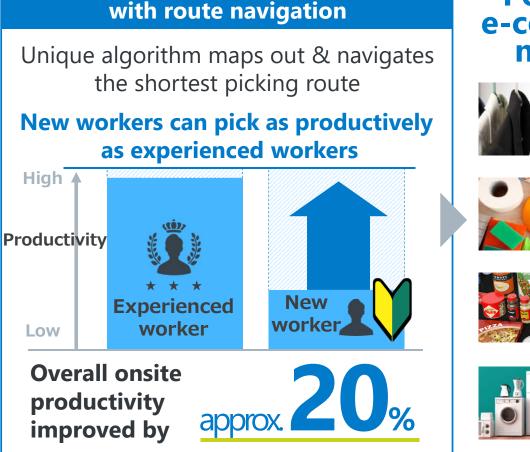


#### MonotaRO Co., Ltd.

- Major online store of industrial supplies
- Number of products: **15 mil** as of Mar 2018
- Sales more than doubled (2.5x) and OI tripled in the last 5 years

#### Warehouse challenges

- Productivity varies among workers
- Stock-outs & opportunity losses
- Longer picking routes



Improve warehouse productivity

### Potential e-commerce markets



Apparel



Household goods



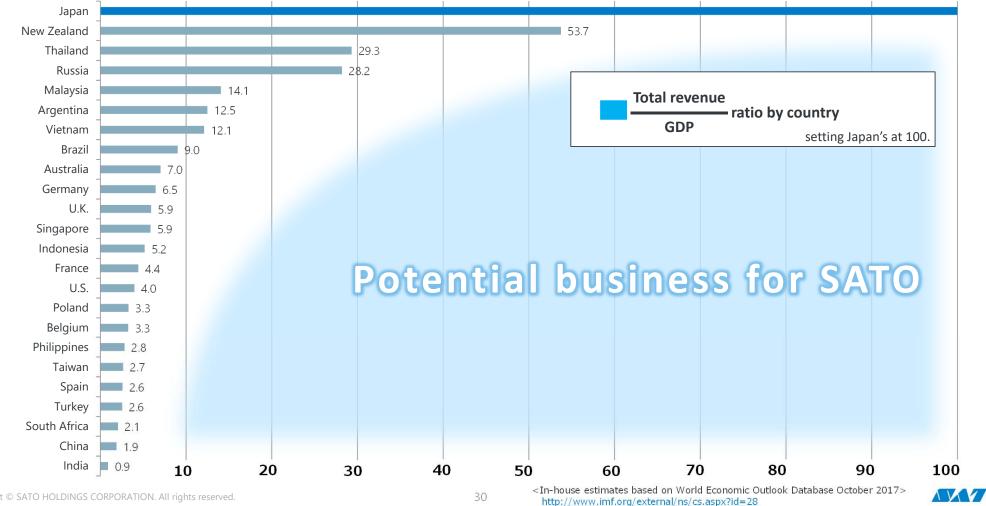




Electric appliances

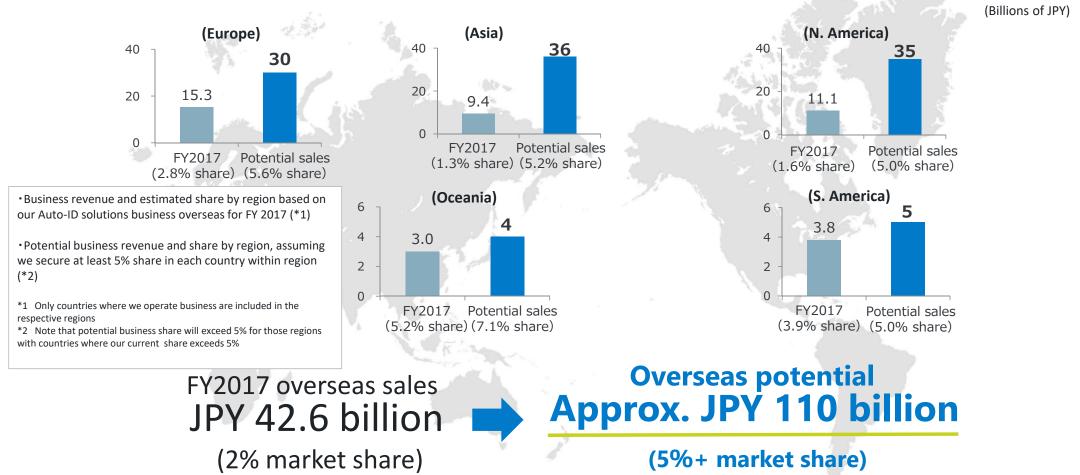


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#### 1-(3) Auto-ID Solutions Business (Overseas): Opportunities (1)

### 1-(4) Auto-ID Solutions Business (Overseas): Opportunities (2)



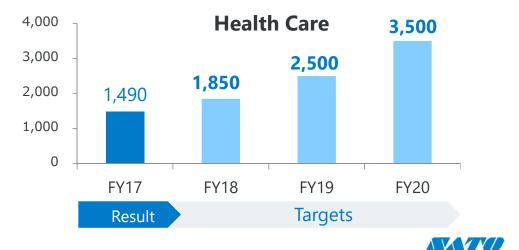
### 1-(5) Auto-ID Solutions Business (Overseas): Sales Targets by Vertical

(Millions of JPY)

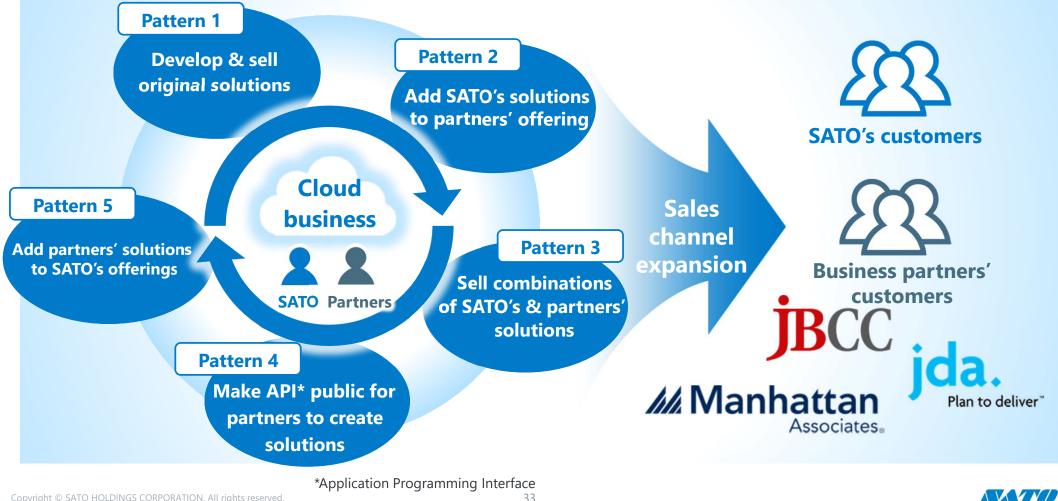










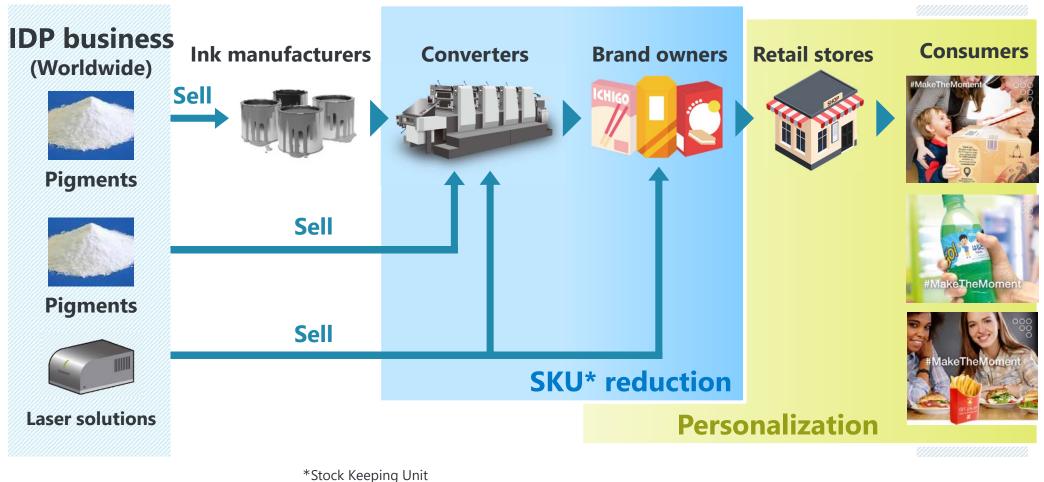


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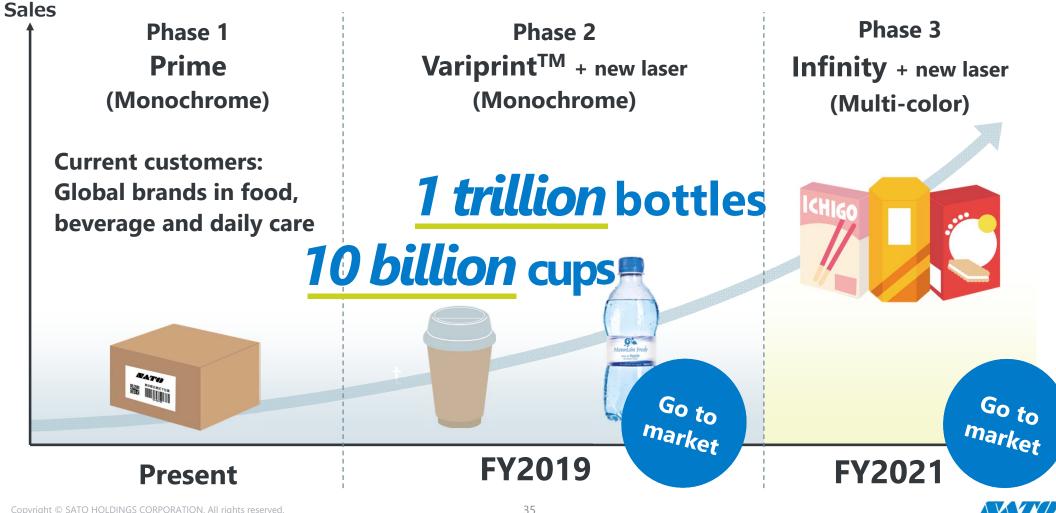
### **3-(1)** Commercialize IDP technology-based solutions

### **IDP business model**





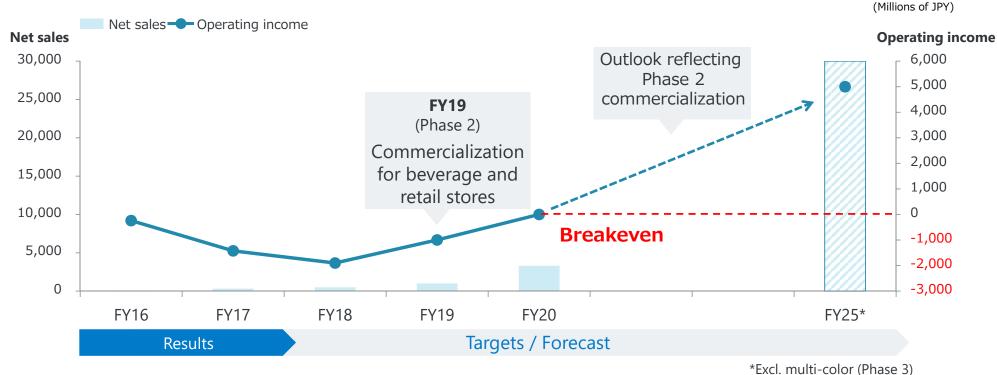
### **3-(2)** Commercialize IDP technology-based solutions



### 3-(3) Commercialize IDP technology-based solutions

Promoting the sales of technologies that can be commercialized has the potential to bring substantial growth

### Medium-term management plan (IDP business outlook)





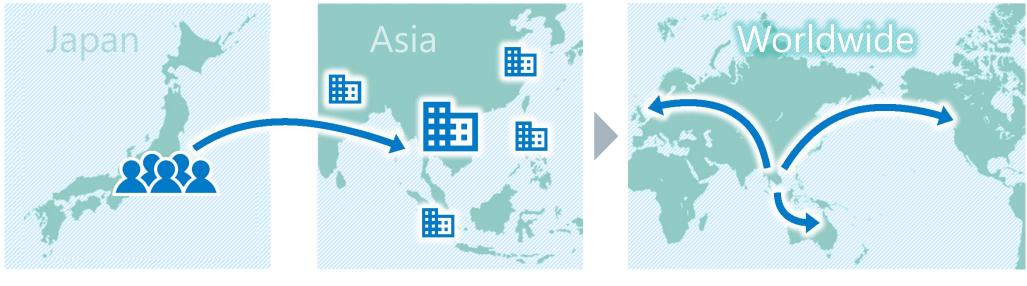
#### **Focus areas for resource allocation**

## **Invest with emphasis on overseas Auto-ID Solutions business**

- **1.** Invest in personnel who would drive our Auto-ID Solutions business worldwide
- 2. Develop high-speed RFID manufacturing equipment in-house
- 3. Optimize consumables production functions
- 4. Establish global network for primary labels business outside Japan
- 5. Invest in research & development of strategic printer models
- 6. Build global sales infrastructure (CRM)
- 7. Develop and roll out our solution services in Japan for markets outside Japan
- 8. Develop IDP technologies and IDP solutions businesses



# 1. Invest in personnel who would drive our Auto-ID Solutions business worldwide



Train immediate prospects in Japan

Send them to Asian subsidiaries to experience business overseas

Send them to other regions besides Asia

Example: A domestic department head has been posted to one of our key target countries overseas for about 3 months to study feasibility of setting up a subsidiary to expand our Auto-ID Solutions business

#### 2. Develop high-speed RFID manufacturing equipment in-house

## **Example: Annual RFID potential in the health care industry**\*<sup>1</sup>



\*1 Calculated based on 2016 statistics from WHO \*2 Flexible tubes inserted into a body to remove fluid or inject medicine

## Implementation example:

# **Mie University Hospital**





Attach **RFID** wristbands

**Improving 3-point verification efficiency with RFID** 

Read patient's wristband over blanket

Read medicine

RFID's capability of reading data without making contact can reduce patient burden and data collection time in comparison to barcodes



## (Blank)



#### 5. Invest in research & development of strategic printer models Strategic global model Released Released Released in Mar18 Due out SOS SATO Online Services SOS SATO Online in FY14 in FY16 SOS **FY19** SOS SATO Online New CL4NX LR4NX-FA FX3-LX compact CL6N) printer Support via global maintenance network

# High value-add, high profitability

## **Expand to various markets**







**Public** 







Health Care

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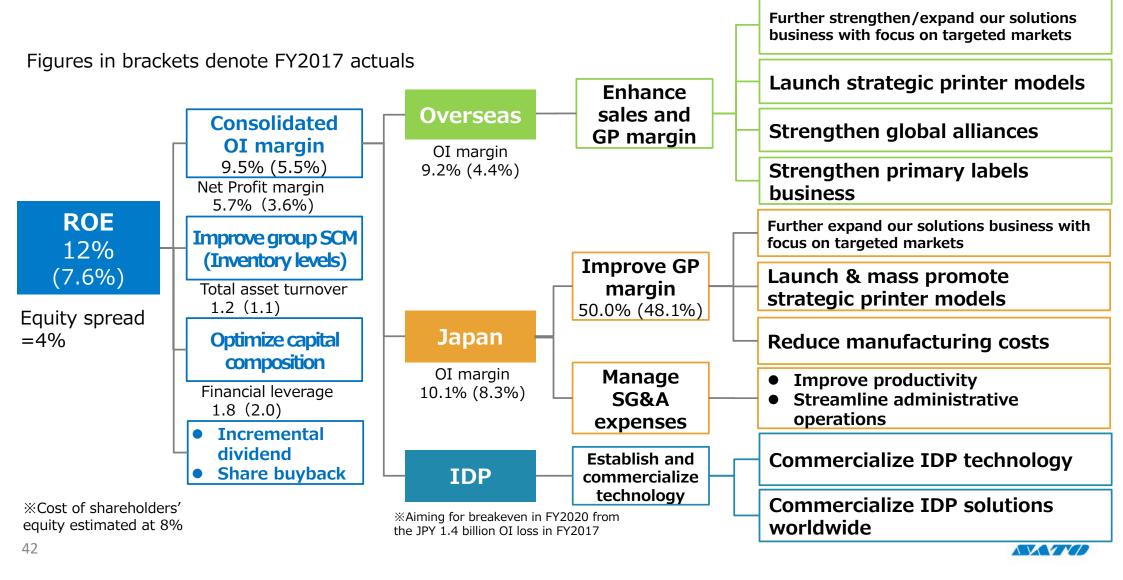
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Food

Logistics



# Roadmap to Higher Capital Efficiency (FY2020)



#### <Reference> Examples of Initiatives to Boost Capital Efficiency in FY17

#### Launch new products

- Strengthen solutions capabilities
- Focus on targeted markets and new domains

# Reduce manufacturing costs

- Improve productivity
- Streamline administrative operations
- Expand end user business
- Launch new products

# Improve consumables GP margin

Develop new solutions businesses

#### M&A, Innovative businesses

Inline digital printing (IDP)

Sustainable consumer packaging

- Released new label printer "FLEQV® FX3-LX"
- Provided a high precision indoor location system in support of Nagoya Univ. Hospital's Smart Hospital Initiative
- Reduced consumables cost by 2.7% through materials change and capital expenditures for productivity improvement (vs. 2.2% in FY16)
- Improved per capita productivity to JPY 3.3 million from previous FY level of JPY 2.7 million
- Expanded direct sales business within the retail sector (North America)
- Improved consumables GP margin by 2.9 percentage points YoY for the Base business overseas
- Made progress in development of digital retail solution (North America)
- Achieved sales of JPY 8.6 billion in Primary Labels business (vs. JPY 7.5 billion in FY16)
- Showcased packaging solution with high-speed, high-resolution printing of grayscale images at "drinktec" (international trade fair for beverage and liquid food industry), Germany
- Pursued discussions with a food manufacturer to expand products utilizing sustainable packaging

## III. FY2018 Consolidated Financial Targets



#### **FY2018 Consolidated Targets**

	FY2018 (Targets)	FY2017	Change	ΥοΥ
Net Sales	120,000	113,383	+6,616	105.8%
Operating Income	7,300	6,249	+1,050	116.8%
Ordinary Income	7,100	5,888	+1,211	120.6%
Profit attributable to owners of parent	4,100	4,074	+25	100.6%
EBITDA*	13,000	11,814	+1,185	110.0%

Exchange rates assumed in FY18 forecast: JPY 110/USD, JPY 130/EUR Average exchange rates for FY17: JPY 110.85/USD, JPY 129.65/EUR \* EBITDA = Operating Income + Depreciation + Amortization



#### Sales and OI by Segment

	FY2018	FY2017	Change	
	(Targets)	FTZVT7	Change	ΥοΥ
<b>1. Auto-ID Solutions business</b>	(Overseas)			
Sales	47,500	42,585	+4,914	111.5%
Operating Income	3,100	1,865	+1,234	166.1%
2. Auto-ID Solutions business	(Japan)			
Sales	72,000	70,482	+1,517	102.2%
Operating Income	6,100	5,831	+268	104.6%
3. IDP Solutions business				
Sales	500	315	+184	158.6%
Operating Income	-1,900	-1,426	-473	
Consolidated				
Sales	120,000	113,383	+6,616	105.8%
Operating Income	7,300	6,249	+1,050	116.8%
Operating Income %	6.1%	5.5%	+0.6pt	



## **Major Initiatives for FY2018**

	Operating Income				
	FY2017		FY2018		
① Auto-ID Solutions business (Overseas)					
<ul><li>Gain benefits of investments</li><li>Reduce costs at SATO Global Solutions</li></ul>	1,865		3,100 (+1,234)		
② Auto-ID Solutions business (Japan)					
<ul> <li>Keep improving product mix &amp; mechatronics GP margin</li> <li>Do more of "Sell the solution, not the product"</li> </ul>	5,831		6,100 (+268)		
<b>③ IDP Solutions business</b>					
<ul> <li>Commercialize advanced monochrome printing technology</li> <li>Continue development of multi-color printing capability</li> </ul>	▲1,426		▲ 1,900 (▲ 473)		

# Appendix1. FY2017 Results based on FY2016 ClassificationP49 – P552. SATO TerminologiesP56 – P59



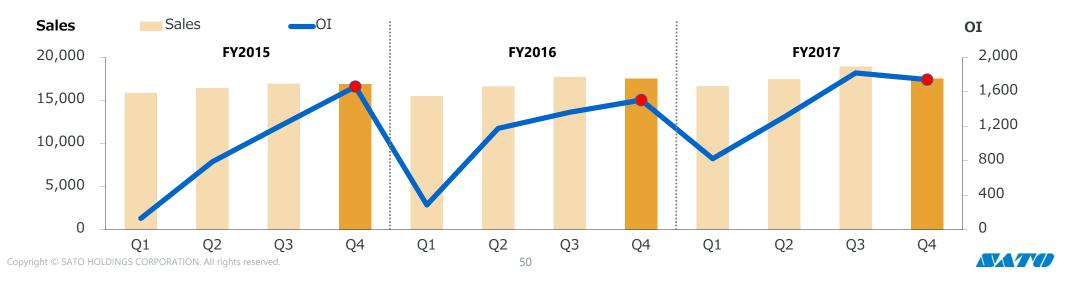
#### **Consolidated Results**

		FY2017	FY2016	Change	YoY	excl. FX impact
1	Total Sales	70,558	67,375	+3,182	104.7%	104.7%
Japan	Operating Income	5,688	4,331	+1,357	131.3%	130.5%
North	Total Sales	11,006	10,646	+360	103.4%	101.0%
America	Operating Income	-57	-62	+4		
South	Total Sales	3,437	2,933	+503	117.2%	118.6%
America	Operating Income	264	146	+118	181.2%	177.9%
_	Total Sales	14,567	12,525	+2,042	116.3%	106.6%
Europe	Operating Income	-1,115	584	-1,699		
Asia/	Total Sales	13,813	12,821	+992	107.7%	102.4%
Oceania	Operating Income	1,505	965	+540	156.0%	148.3%
	Total Sales	42,825	38,926	+3,898	110.0%	104.6%
Overseas	Operating Income	597	1,633	-1,036	36.6%	30.2%
Elimination	Operating Income	-36	139	-176		
	Total Sales	113,383	106,302	+7,081	106.7%	104.7%
	Operating Income	6,249	6,104	+144	102.4%	100.1%



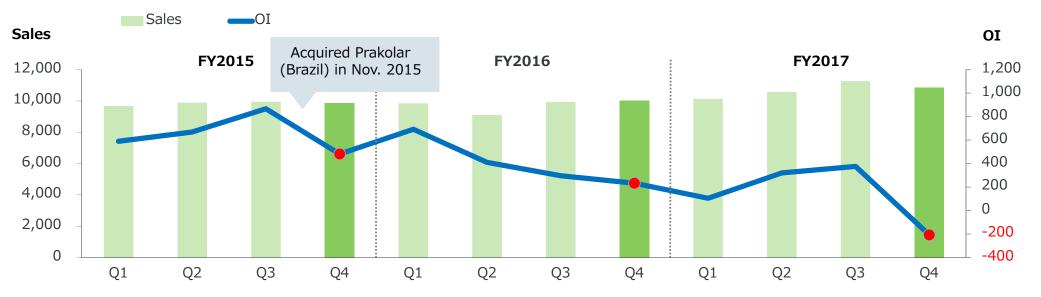
#### Japan

	EV2017	EV2010	Change		
	FY2017	FY2016	Change	ΥοΥ	
Mechatronics Sales Consumables Sales	27,564 42,993	25,136 42,238	+2,428 +754	109.7% 101.8%	
Total Sales	70,558	67,375	+3,182	104.7%	
Gross Profit Gross Profit %	33,903 48.1%	30,943 45.9%	+2,960 +2.1pt	109.6% 	
Operating Income	5,688	4,331	+1,357	131.3%	
Operating Income %	8.1%	6.4%	+1.6pt		



#### **Overseas**

	FY2017	FY2016	Change			
	F12017	F12010		ΥοΥ	excl. FX impact	
Total Sales	42,825	38,926	+3,898	110.0%	104.6%	
Gross Profit Gross Profit %	16,029 37.4%	14,703 37.8%	+1,326 -0.3pt	109.0%		
Operating Income	597	1,633	-1,036	36.6%	30.2%	
Operating Income %	1.4%	4.2%	-2.8pt			

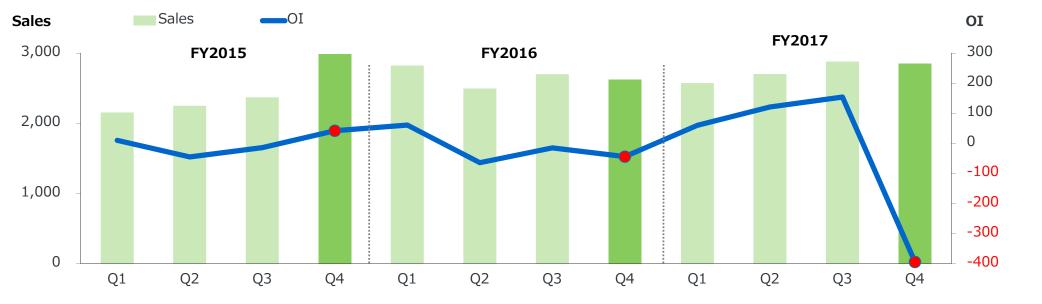


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#### **North America**

	FY2017	FY2016	Change			
	F12017	F12010	Change	ΥοΥ	excl. FX impact	
Total Sales	11,006	10,646	+360	103.4%	101.0%	
Gross Profit Gross Profit %	3,256 29.6%	2,845 26.7%	+411 +2.9pt	114.4% 		
Operating Income	-57	-62	+4			
Operating Income %						



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#### **South America**

	FY2017	FY2016	Change		
	F12017	F12010	Change	ΥοΥ	excl. FX impact
Total Sales	3,437	2,933	+503	117.2%	118.6%
Gross Profit Gross Profit %	1,311 38.2%	1,124 38.3%	+187 -0.2pt	116.7% 	
Operating Income	264	146	+118	181.2%	177.9%
Operating Income %	7.7%	5.0%	+2.7pt		



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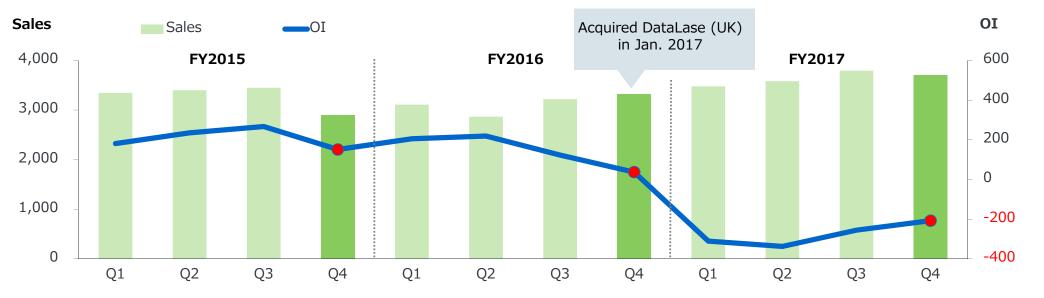
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A V Y M D

#### **Europe\***

\* DataLase consolidated in FY2017

	FY2017	FY2016	Change			
	F12017	F12010	Change	ΥοΥ	excl. FX impact	
Total Sales	14,567	12,525	+2,042	116.3%	106.6%	
Gross Profit Gross Profit %	4,862 33.4%	4,640 37.1%	+222 -3.7pt	104.8% 		
Operating Income	-1,115	584	-1,699			
Operating Income %		4.7%				



#### Asia & Oceania

	FY2017	FY2016	Change		
	F12017	F12010	Change	YoY	excl. FX impact
Total Sales	13,813	12,821	+992	107.7%	102.4%
Gross Profit Gross Profit %	6,599 47.8%	6,093 47.5%	+505 +0.2pt	108.3% 	
Operating Income	1,505	965	+540	156.0%	148.3%
Operating Income %	10.9%	7.5%	+3.4pt		





### **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 Japan and overseas businesses. The latter is made up of Base and Primary Labels businesses.
2	Auto-ID Solutions business overseas: Base business and 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.)
3	Materials business	Develops, manufactures and sells special materials used mainly in Inline Digital Printing. A reporting segment established new in FY 2017, it was renamed to "IDP Solutions business" in FY2018 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	The Last Inch	The final leg of last mile challenges crucial to IoT (Internet of Things) where a wide range of items must be tagged with identifiers to be collected as reliable small data. This "last inch" is SATO's business domain and where it connects the virtual and physical to provide customers value by ensuring accuracy and sustainability, saving labor and resources, offering reassurance, and building emotional connections.
6	DCS & Labeling +One (DCS: Data Collection 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-ID 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.
7	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.
8	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 concepts/initiatives	Description	
9 Teiho		<ul> <li>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.</li> <li>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.</li> <li>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.</li> </ul>	
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. Mechatronics hardware 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 bridge the last inch. 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 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)**

	Products, 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 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	VISION Retail Platform	An RFID-based IoT solution for the retail industry that delivers a game-changing consumer experience. VISION was developed by SATO Global Solutions (SGS), a US subsidiary established in 2015 to globally drive the Auto-ID solutions integration business that includes development, production and maintenance of hardware and consumables.
11	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 variable 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 launch in 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 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 Autoadesivos LTDA. (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. Now a SATO consolidated subsidiary.





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