IR Presentation for Fiscal Year 2017, Ending March 2018

May 16, 2018

JTEKT Corporation

1. Results for Fiscal Year 2017, Ending March 2018

- 2. Forecasts for Fiscal Year 2018, Ending March 2019
- 3. Progress of Mid-term Business Plan

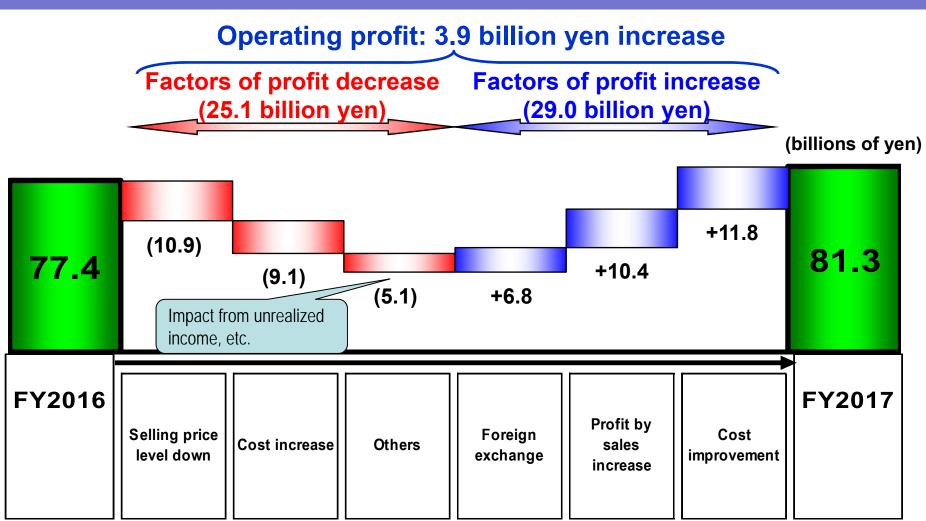
JTEKT 3

1-1) Consolidated Performance

Sales and profits increased due to weaker yen, increased quantity, and the effect of newly consolidated subsidiaries.

(billions of yen)							(billions of yen)
		FY20	16	FY20)17	Increase/	Increase/
						Decrease	Decrease (%)
Sales		,	1318.3	1	441.1	+122.8	+9.3%
Operating pro	ofit	(5.9%)	77.4	(5.6%)	81.3	+3.9	+5.1%
Ordinary pro	ofit	(5.9%)	78.0	(5.7%)	82.5	+4.4	+5.7%
Net Income(*1)	(3.6%)	47.5	(3.4%)	49.6	+2.1	+4.6%
Foreign exchange	rate	j	£108/USD		¥111/USD	¥3 weak Yen	
(Apr. to Mar.)		Ę	≨119/EUR		¥130/EUR	¥11 weak Yen	
*1: Profit attributable to o	wners of p	parent					
(%): Percentage of profi	it on		4.0	=>404		Increase/	
FY2016		16	FY2017		Decrease		
Dividend	nterim	2	21 yen	2	21 yen	-	
	ear-end	2	21 yen	2	22 yen	+1 yen	

Profit increased due to "sales increase" and "cost improvement" which covered impact by "selling price level down" and "cost increase"



1-3) Results by Business Units (Mechanical Components)

Despite FX-rate advantage and sales increase, profit ended at the same level as the previous year due to launch of downstream-assist-type EPS, sales price down and cost increase.

(billions of yen)

	Mechanical components	FY2016	FY2017	Increase/ Decrease	Increase/ Decrease (%)
Sales		1176.0	1279.5	+103.5	+8.8%
	Steering sytems	642.9	711.8	+68.8	+10.7%
	Drivelines	145.5	145.4	(0)	(0.1%)
	Bearings	387.6	422.3	+34.7	+9.0%
0	perating profit	68.2	68.2	+0	+0.0%
	Operating profit (%)	(5.8%)	(5.3%)	-	-

1-4) Results by Business Units (Machine Tools & Others)

Profits increased due to the effect of sales increase mainly in Japan and North America.

(billions of yen)

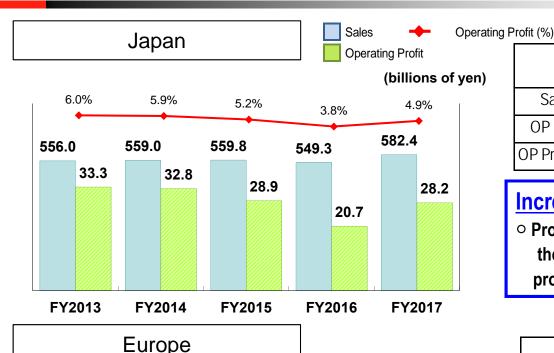
	Machine tools & others	FY2016	FY2017	Increase/ Decrease	Increase/ Decrease (%)
S	Sales	142.2	161.5	+19.3	+13.6%
	Machine tools	139.9	160.0	+20.0	+14.4%
	Others	2.2	1.5	(0.7)	(33.1%)
C	perating profit	9.1	12.8	+3.6	+39.8%
	Operating profit (%)	(6.5%)	(8.0%)	-	-

JTEKT

(billions of yen)

1-5) Financial Results by Company Location [1]





1011t (70)			` ,
	FY2016	FY2017	Increase/
	F 12010	F 12017	Decrease
Sales	549.3	582.4	33.0
OP Profit	20.7	28.2	7.4
OP Profit (%)	3.8%	4.9%	-

Increase in sales/profits

 Profit increased due to the effect of the foreign exchange rate, sales increase and productivity improvement.

(billions of yen)

	EV2014	EV/2017	Increase/	
	FY2016	FY2017	Decrease	
Sales	193.3	220.7	27.3	
OP Profit	6.7	3.8	(2.9)	
OP Profit (%)	3.5%	1.7%	-	

Increase in sales/decrease in profits

 Profits decreased due to the cost increase such as development cost, and the worsened productivity in bearings

1-6) Financial Results by Company Location [2]

9.8%

FY2017

164.4

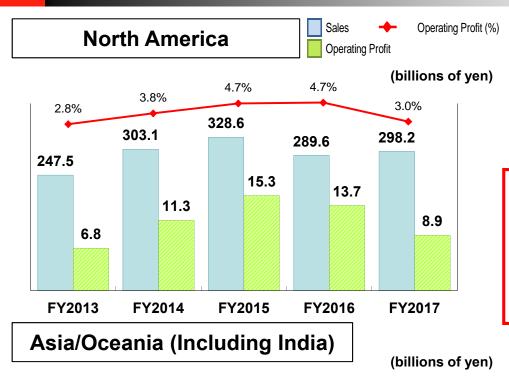
9.6%

135.3

FY2016



(billions of yen)



	FY2016	FY2017	Increase/
	1 12010	1 12017	Decrease
Sales	289.6	298.2	8.6
OP Profit	13.7	8.9	(4.7)
OP Profit (%)	4.7%	3.0%	-

Increase in sales/decrease in profits

- Sales decreased slightly except for the impacts of the foreign exchange rate and M&A
- Large profit decrease due to the launch of downstream-assist-type EPS and the decrease in quantity

(bil	lions	of	yeı

	FY2016	FY2017	Increase/	
	F 12010	F 12017	Decrease	
Sales	135.3	164.4	29.0	
OP Profit	12.9	16.1	3.1	
OP Profit (%)	9.6%	9.8%	-	

Increase in sales/profits

 Sales and profits increased due to the effect of weak yen and sales increase, in addition to the M&A impact

13.6 14.5 12.9 16.1

FY2015

8.4%

149.3

9.3%

FY2014

156.8

8.7%

FY2013

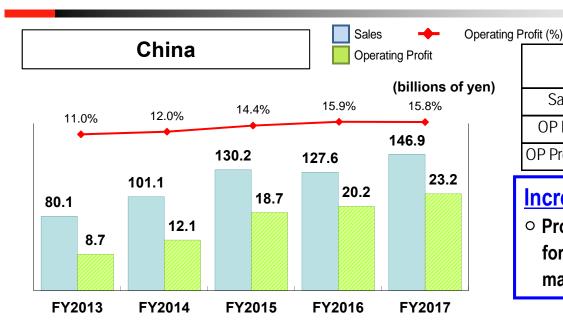
157.0

JTEKT

1-7) Financial Results by Company Location [3]



(billions of yen)



1011t (70)			, ,
	FY2016	FY2017	Increase/
	1 12010	F 12017	Decrease
Sales	127.6	146.9	19.3
OP Profit	20.2	23.2	3.0
OP Profit (%)	15.9%	15.8%	-

Increase in sales/profits

 Profits increased due to the effect of the foreign exchange rate and the sales increase mainly in the steering systems

(billions of yen)

So	South America/Other							(billions of yen)	
2.2	%	(2.4%) (4	1.8%)	4.5	%	7.8	%	
•		24.3		•			28.3		
20.9	l		20.	.9	22.8			2.2	
						1.0			
	0.4					1.0			
		(0.5)	(1.0)					
FY2	013	FY20	14 F	Y2015	FY2	2016	FY2	2017	

	FY2016	FY2017	Increase/
	F 12010	F 12017	Decrease
Sales	22.8	28.3	5.4
OP Profit	1.0	2.2	1.1
OP Profit (%)	4.5%	7.8%	-

Increase in sales/profits

 Sales and profit increased due to the increase in the sales of the steering systems

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World economy

- ➤ Maintains gradual economic growth as a result of the easymoney policy and tax reduction policy of the U.S.
- Unpredictable due to the stringent import tariffs and protectionist policy of the U.S.

Japan

- Gradual recovery due to an increase in domestic and foreign demands.
- > Carefully watch the management environment changes such as FX rate fluctuation due to geopolitical risks, etc.

2-2) Forecasts for Fiscal Year 2018

Despite negative impact due to foreign exchange rate, FY2018 forecasts an increase in sales and profits by the effect of M&A and increase in quantity.

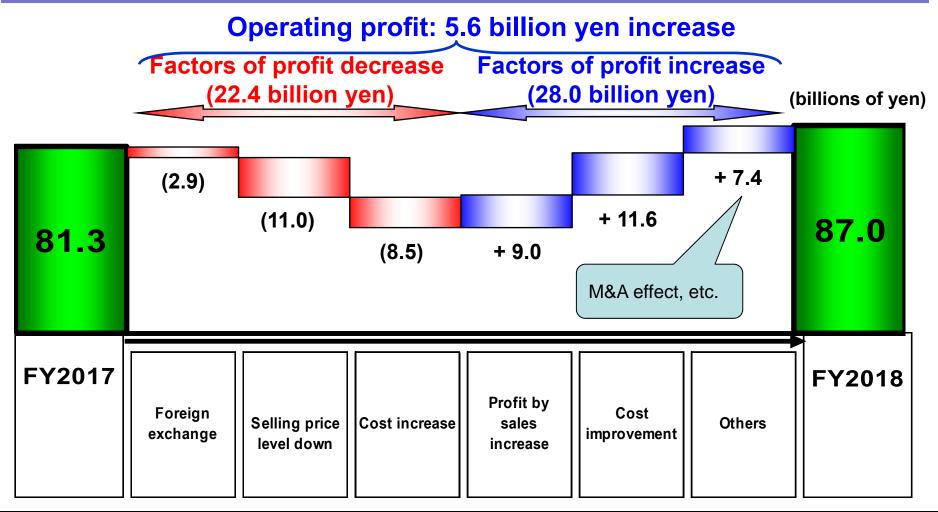
(billions of yen)

	FY2017		FY2018 (Forecast)	Increase/	Increase/ Decrease	
	Full year (Actual)	1H	2H	Full year	Decrease	(%)
Sales	1441.1	720.0	780.0	1500.0	+58.8	+4.1%
Operating profit	(5.6%) 81.3	(5.4%) 39.0	(6.2%) 48.0	(5.8%) 87.0	+5.6	+6.9%
Ordinary profit	(5.7%) 82.5	(5.3%) 38.5	(6.1%) 47.5	(5.7%) 86.0	+3.4	+4.2%
Net Income(*1)	(3.4%) 49.6	(3.3%) 23.5	(4.0%) 31.5	(3.7%) 55.0	+5.3	+10.7%
Foreign exchange rate (Apr. to Mar.)	¥111/USD ¥130/EUR	¥105/USD ¥130/EUR	¥105/USD ¥130/EUR	¥105/USD ¥130/EUR	¥6 strong yen -	
Capital expenditure	66.6	33.0	39.0	72.0	+5.3	+8.0%
Depriciation	60.4	[*] 31.0	33.0	64.0	+3.5	+5.9%
Dividend	43 yen	22 yen	22 yen	44 yen	+1 yen	
(*1)Profit attributable	e to owners of paren					

%): Percentage of profit on sales

2-3) Operating Profit Analysis

"Selling prices level down" and "cost increase" will be covered by the effect of "the sales increase" and "cost improvement". Also with M&A effect, FY2018 will expect to update the highest profit.



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3) Progress of Mid-Term Business Plan

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1. Strategies of Business Units

- 1) Summary
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- 3) Driveline
- 4) Bearings
- 5) Machine Tools & Mechatronics
- 6) Actions for New Business

2. Actions for Corporate Value Enhancement

1) Summary

JTEKT

3-1-1) Review of Initial Target (vs. in FY2014)

Koyo

TOYODA

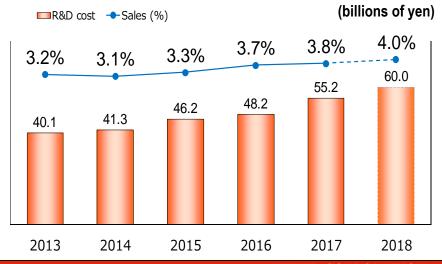
Difference from the initial target in FY2014

	Target of FY2018 (Set in FY2014)	Forecast in FY2018 (Present)	Increase/ Decrease
Sales	1340.0 billion yen	1500.0 billion yen	+160.0 billion yen
OP Profit	100.0 billion yen	87.0 billion yen	(13.0 billion yen)
OP Profit (%)	7.5%	5.8%	(1.7%)

Review

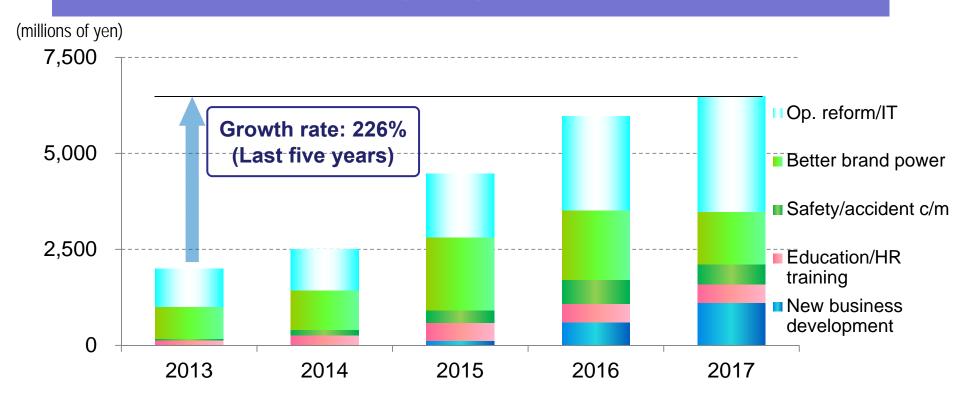
- Price reduction pressure for steering products
- Investment in Rack-assist EPS and high-loading by its new launch
- Preparation for trend shift such as autonomous driving / EV (R&D cost increase)
- Investment for strengthening the business foundation that exceeds the cost reduction by productivity improvement

Trend of R&D cost (Reference)



3-1-1) Investment to Strengthen Business Foundation (Non-financial value)

Accelerate human resource development, investment for safety & accident prevention, and further operational reform & utilization of IT, that contribute to the establishment of the company's long-term business foundation

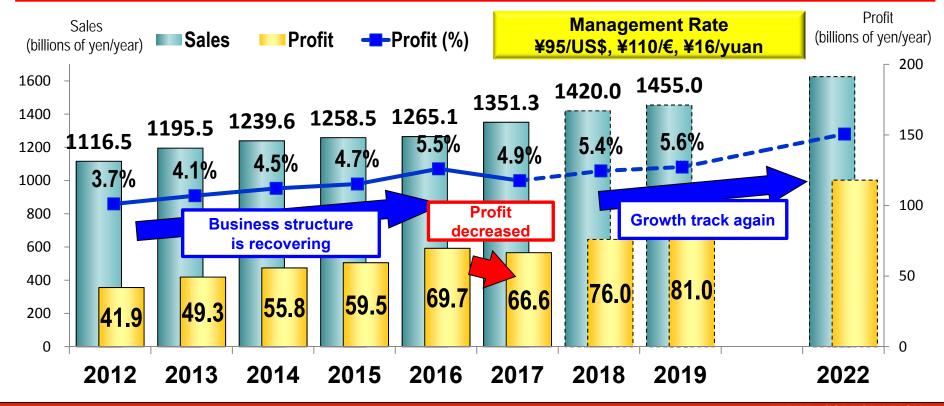


Trend of business foundation (fundamentals)-related cost

3-1-1) Review – Profit & Loss Trend (Management rate)

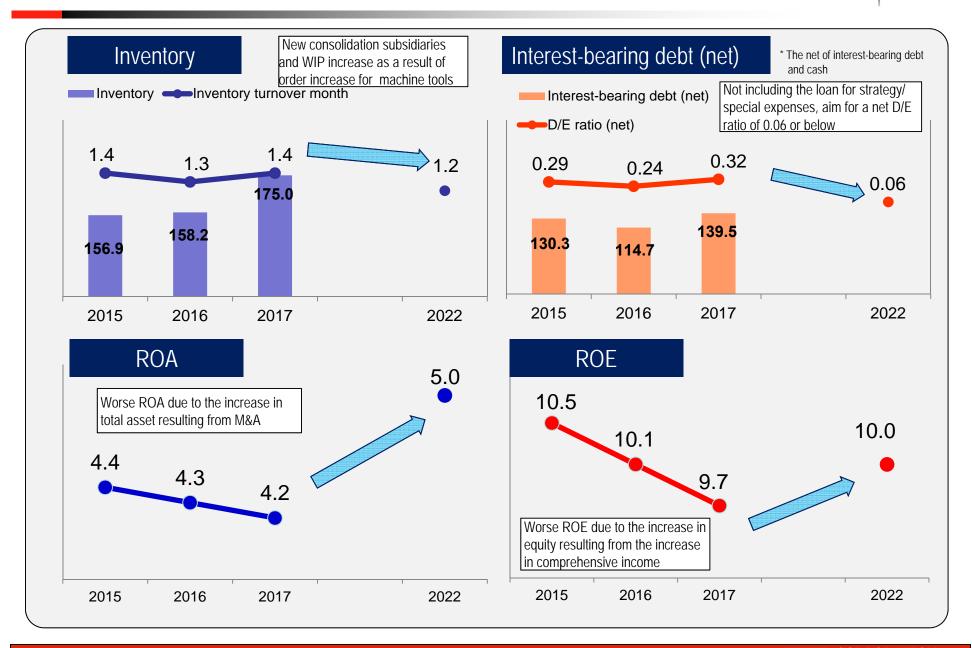
Business structure had improved until FY2016 except for the foreign exchange rate. but FY2017 profit decreased because of;

- (1) New launch of Rack-assist EPS in North America,
- (2) Investment for the future actions such as ADAS/IoE
- → FY2018 will recover to the FY2016 level, then afterwards back on growth track as a result of the stabilization of rack-assist EPS business and collecting the benefits on future investment



3-1-1) Review - Management Index (Consolidated)





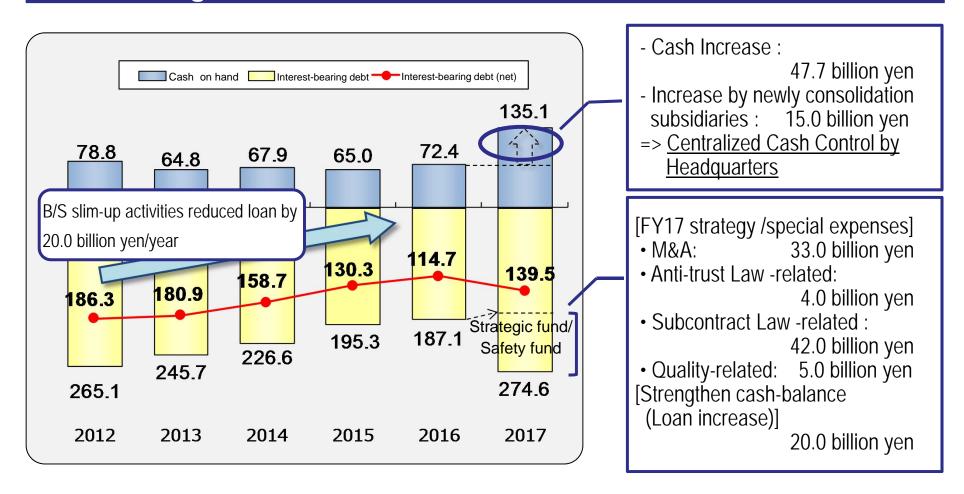
3-1-1) Secure Substantial Cash-balance for "Offensive and Defensive" measures for the future

Koyo TOYODA



The B/S slim-up activities promoted the financial structure improvement

=> Financial Strategy shift: Secure Substantial cash-balance for sustainable growth



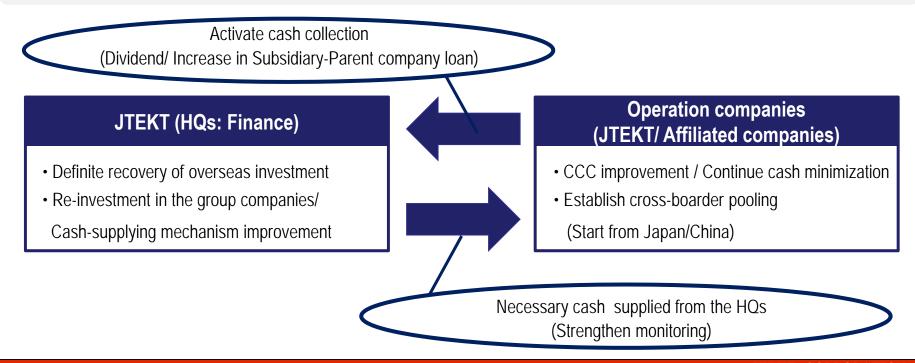


Re-establish and strengthen the structure to centrally manage the JTEKT group's cash-balance at JTEKT HQs

3-1-1) Re-establishment of Fund Portfolio

As the "safety funds" for preparation for financial crisis and "strategic funds" for business operation,

- HQs centrally manage the cash-balance and <u>expeditiously and flexibly invest</u> within the group companies.
- prepare for the risk of losing liquidity of the cash, associated with the currency regulation of the emerging countries



2) Steering Systems

(Abbreviation list)

ADAS: Advanced Driver Assistance System

RP-EPS: <u>Rack Parallel-EPS</u>
DP-EPS: <u>Dual Pinion-EPS</u>
PMI: <u>Post Merger Integration</u>

JAMO: <u>J</u>TEKT <u>Automotive Mo</u>rocco SAS FAMO: <u>Fuji Automotive Mo</u>rocco SAS

JIN: <u>J</u>TEKT <u>I</u>ndia LTD.

JSAI: <u>JTEKT SONA Automotive India LTD.</u> SKSS: <u>Sona Koyo Steering Systems LTD.</u>

Continue to maintain the top share for steering, and to be the No. 1 & Only One as the top runner for advanced steering technology such as ADAS

Environmental changes

Viewpoint

Intense market competition

- Intense cost competition
- Improvement of system solution
- Global business opportunity

Evolution of technology

- Spread of EV/HV
- Introduction of autonomous driving, Al evolution
- Introduction of EPS to commercial vehicles

Change in market

- · Growth in markets in the emerging countries
- Aging society
- Decrease in workforce

Technology development ahead of the future

Business strategy

- Global competence of negotiation
- √ Strengthen cost competitiveness
- ✓ Promotion of automated line

Product strategy

- Strengthen ADAS steering
- Deepen development capability for control
- Strengthen developing steering for large vehicles

Footprint change

Strategy by region

- Global supply structure Strengthen the growing regions
- √ Volume production of RP-EPS

Certain execution of the mid-term business plan

Policy

Strengthen group cooperation Strengthen competitiveness

Strengthen emerging country business

Strengthen downstream-assisttype EPS system field

Development of ADAS steering

In-house manufactured MCU

January 2018 Reorganization of Fuji Kiko as a fully-owned subsidiary, start of PMI activity to strengthen business

1. Ideal

Steering share: Keep the 25% of world top share (Based on the assist type)

Aim for 25% global share of columns through sales expansion/share expansion of column part

World market (Column part)



2. Strengthen system support

Present Fuji Kiko and JTEKT develop/ performs sales activity



JTEKT develop/ performs sales activity

New framework

System development/supply

3. Promote PMI activity

Strengthen system foundation to create cooperation as JTEKT group and to strengthen business

Customer

Unification of customer contacts
Strengthen sales as a system

Steering system JTEKT

More effective development and unification of operation using JTEKT drawings

through the commissioned volume development at Fuji Kiko

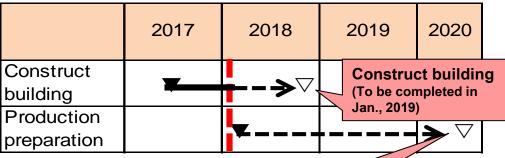
I-shaft
Koyo Machine
Industries

<u>Column</u> Fuji Kiko

3-1-2) Establish Business Foundation in Morocco

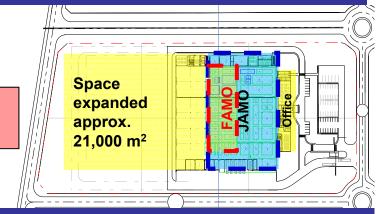
Supply steering systems in Morocco where expansion of demand is expected, and establish a business foundation in North Africa

1. SOP schedule



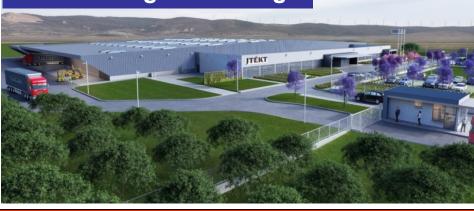
Start of volume production (To be started in Sep., 2020)

3. Layout of site and building

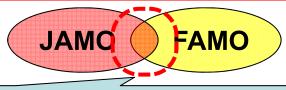


4. Collaboration with Fuji Kiko

2. Rendering of building



Fuji Kiko is planning to start inplant production at JTEKT



- Space sharing of office and utilities
- Streamlining of organization through the shared service of administrative divisions

3-1-2) Strengthen Business in India

Koyo TOYODA

SKSS became JTEKT's consolidated subsidiary in June 2017 to promote strengthening STG business in India

1. Changed company name "SKSS"

New name from April 2018

Both in name and reality, start operation as "JTEKT" and aim to further spread the JTEKT brand in India

Former name: Sona Koyo Steering Systems Limited



New name: JTEKT India Limited

2. JTEKT India absorb and merge with JSAI

New operation to be started from Oct. 2018

Integrated a steering subsidiary in India to achieve further efficient operation and synergy effect

[After merger]

JTEKT Japan

Collaboration

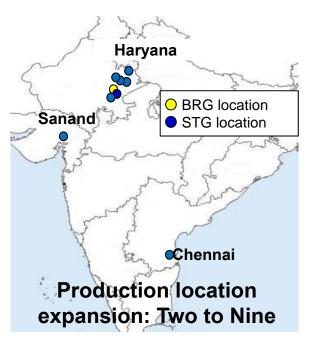
SKSS

JSAI

[After merger]

- As JTEKT India, integrated steering business and customer contacts for the enhancement of customer satisfaction
- Set Gurgaon (Main location of former SKSS) as the regional headquarters for efficient operations and creating synergy effect



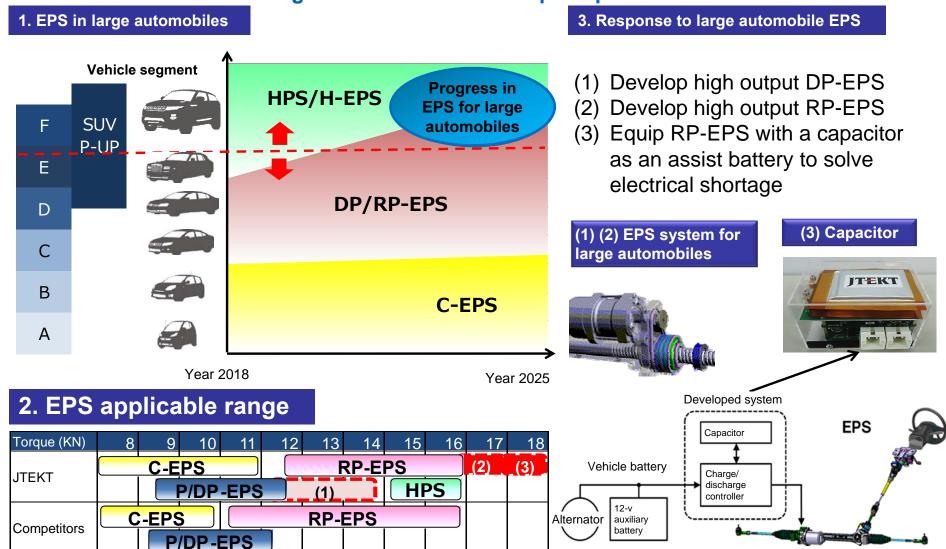


3-1-2) Strengthen Rack-Assist EPS

dina

Koyo TOYODA

Adoption of EPS is increasing along with automated driving of large automobiles such as pickup trucks



Opened and started operation of JTEKT IT Center Akita Corporation on November 2017

Promoting recruit with the target of 40 people by the end of FY18

1. Opening ceremony

<Nov. 24, 2017>





Environment surrounding steering systems

Support high-output **EPS**

Support ADAS Support SBW

Develop **JTEKT MCU**

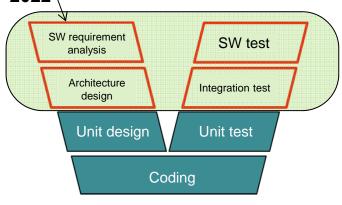
Secure highly capable personnel to strengthen electronic engineering capability

2. Aim of establishment

To solve the shortage of electronic control engineers and to create job opportunities for highly capable personnel to work in their home regions

3. Development field

Promote the upstream development of software at the new company Aim to be an independent development base of the upstream processes by 2022



FY2018 Sales and Profit Forecast

¥95/US\$, ¥110/€, ¥16/yuan

2018

Sales: Expected to achieve the initial target as a result of the FKK/SKSS's increase despite the stagnation of global market growth.

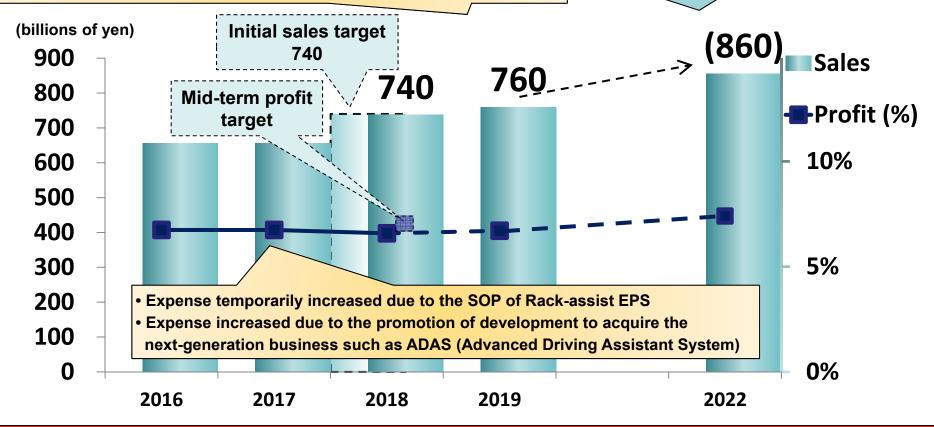
Profit: Difficult to achieve due to the intensification of market competition.

2022

Sales: Steady increase expected

Profit: Expected to achieve

2018 mid-term profit target Promote to achieve target



3) Driveline

(Abbreviation list)

AWD: All Wheel Drive

CVJ: Constant Velocity Joints

ITCC: Intelligent Torque Controlled Coupling

LSD: <u>Limited Slip Differential</u> TCD: <u>Torque Control Device</u> LIC: <u>Lithium-Ion Capacitor</u>

FC: <u>Fuel Cell</u>

3-1-3) Driveline Business Outline

Contribution to "drive" of automobiles through driveline products (System/Unit) **Driveline** (Drive shaft, propeller shaft) **AWD** system (ITCC, Torsen) **Hydraulic system** (Oil pump, **Linear Solenoid Valve)**

3-1-3) Driveline Business Growth Strategy



As a distinctive system supplier that takes advantage of strengths such as AWD and hydraulics, aim to become the No. 1 & Only One for the driveline business.

Environmental changes

Competition

Technology

Market

- Intense cost competition
- Mega suppliers/Different industries
- Request for system solution
- Electrification (Vehicle/System)
- Introduction of autonomous drive, Al evolution
- Environment-friendly engineering

- Growth in emerging market
- Global business opportunity

environment Business

Stagnation 2018

Growth 2022

Strengthen foundation (Profitability, strengthen system development skill) Improve capabilities to make proposals to customers. sales expansion

Policy

Certain execution of the mid-term business plan Improve system solution as a driveline system supplier

Deepen driveline field

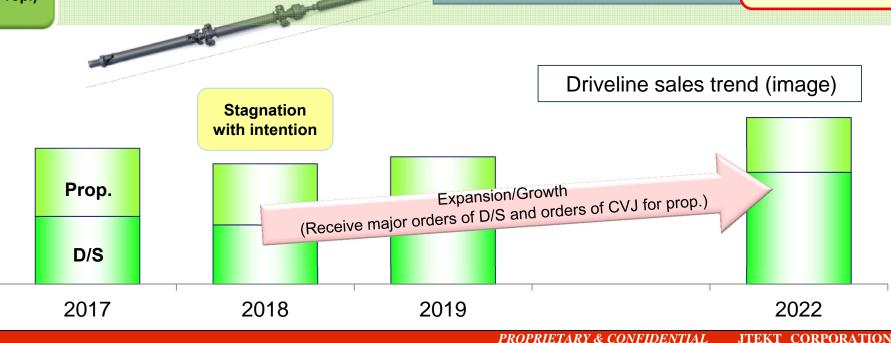
Strengthen **AWD** system

Strengthen hydraulic system

Strengthen support for vehicle electrification (EV/FCV)



<u>Strengthen foundation for future growth/expansion</u> (Selection and concentration/cost reduction/strengthen lineup) 2022-2015 2016-2017 2018-2021 NV improvement/High transmission rate Lightweight/lower **Drive** loss (Fuel efficiency Next-gen. product development shaft Selection and contribution) concentration (D/S) CVJ business for prop. Electrified drive support (Rigidity Thorough cost reduction optimization) Sales expansion/Profitability improvement **Propeller** Competitiveness improvement (Lightweight/lower cost, NV (Noise and vibration) technology improvement) shaft Expand lineup Next-gen. product development (Prop.)

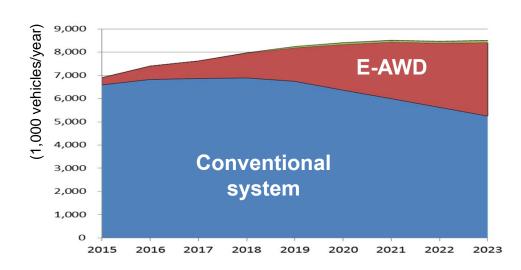


JTEKT 35

3-1-3) Strengthen AWD System

◆Prospect of AWD electrification
While the use of electrical AWD
increases, the demand for the
conventional AWD system is expected
to remain as it is for the time being

Actions for both are necessary



[FF-model]

- 1. Integration of differentials
 - Obtain the know-how of differential engineering
 - -> Achieve size and weight reduction through unitization
- 2. Higher response (Better vehicle responsiveness)
 - ITCC: Compatibility with the present item
 - · Direct-acting hydraulic: No time lag
- 3. Compact ITCC (Small volume)
 - Response to demand in small vehicles
 - -> Low cost and high performance

[FR-model]

Torsen LSD
 Compact/Lightweight (Type-D)
 Higher added-value
 (Diff-lock attached)



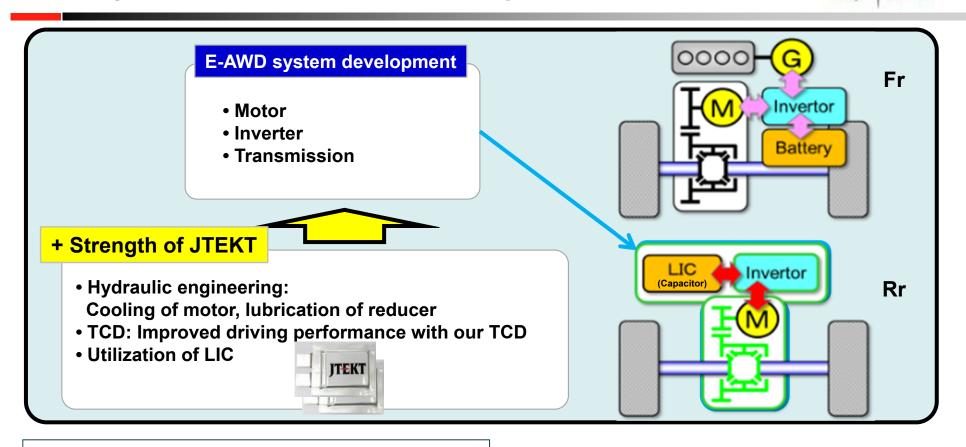
[E-AWD (Next page)]

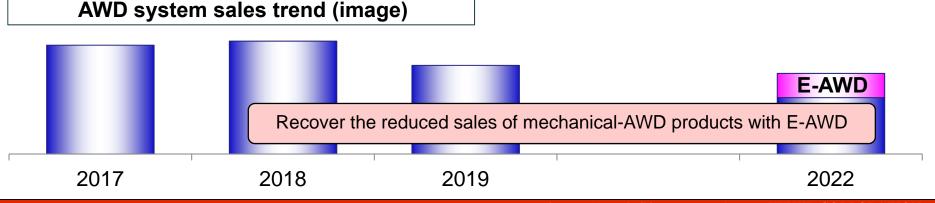
 Developed using full JTEKT engineering



JTEKT Koyo TOYODA

3-1-3) Actions for E-AWD System

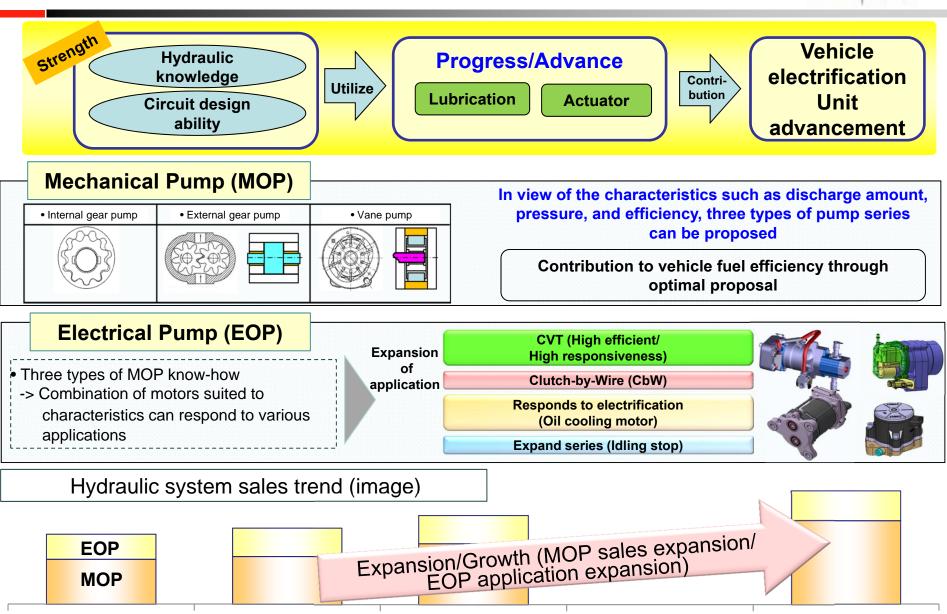




3-1-3) Strengthen Hydraulic System

2018

2017



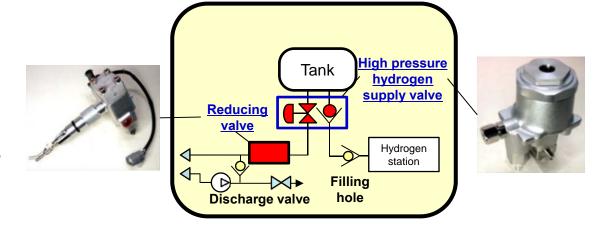
2019

3-1-3) Actions for FC Parts (Valve/Regulator)

Coyo TOYODA

Valve/Regulator

Essential parts for hydrogen's "out/in"
(Contribute to securing safety of fuel cell vehicles)



Action plan/ Direction

Based on the knowledge of full-volume production, build up a "No.1 & Only One" foundation in the hydrogen supply system, and move ahead to expand the field in the future.

Mid-term

Pressure: 70 MPa

Production:

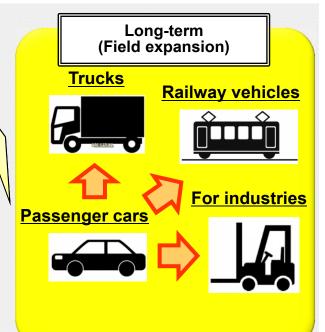
To full-volume production

Present

Pressure: 70 MPa

Production:

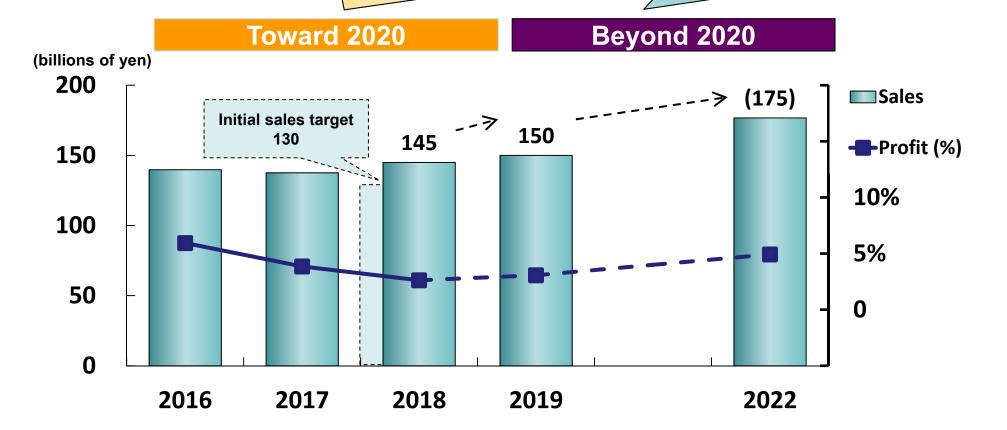
250 sets/month



Although severe situation would continue between 2016 and 2020, our initial target is expected to be achieved

¥95/US\$, ¥110/€, ¥16/yuan

Growing after 2021 ⇒ Huge leap to become a leading company



4) Bearings

(Abbreviation list)

TRB: Tapered Roller Bearing

HUB: Hub unit

•B-HUB (Ball HUB): Ball hub unit

•T-HUB (Tapered HUB): Tapered hub unit

NRB: <u>Needle Roller Bearing</u> SBB: <u>Single Ball Bearing</u> LFT: Low Friction Torque

3-1-4) Bearing Business Growth Strategy



Continue creating value, impress customers, and praised by customers — Lift the "Koyo" brand to be the TOP brand in the world —

Environmental changes

Viewpoint

Intense market competition

- Intense cost competition
- Global support

Evolution of technology

- Electrification/Autonomous driving
- IoT. Industrie 4.0

Change of competitive foundation

- Globalization
- Decline in the workforce

Business strategy

- √ Strengthen cost competitiveness
- √ Strengthen development/production/sales
- ✓ Monozukuri reform
- ✓ Business model transition

Product strategy

- Deepen low torque technology
- ✓ Deepen compact/lightweight technology
- √ From materials development to product development
- √ Support for electrification/new field

Strategy by region

- √ Strengthen foundation development system
- ✓ Reconstruct global production system
- √ Strengthen global sales network
- √ Strengthen global development system

Promote regional strategies

Strengthen production capability

Worksite (Genba) skill improvement/ Change to sophisticated plants

Strengthen sales capability

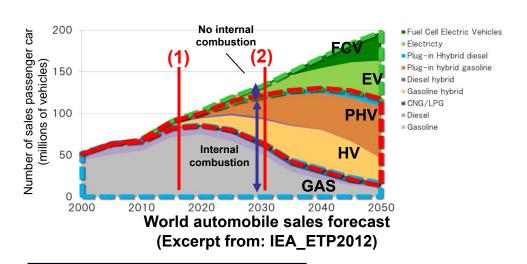
Automobile. IndustrialOE/Aftermarket

Strengthen product potential

Response to electrification, autonomous driving/For Industrial

3-1-4) Environmental Change

Automobile power trend



In 2030, most vehicles are expected to be equipped with an internal combustion engine, therefore impact on sales is to be small, but electrification will surely advance, so

preparation of engineering is a must

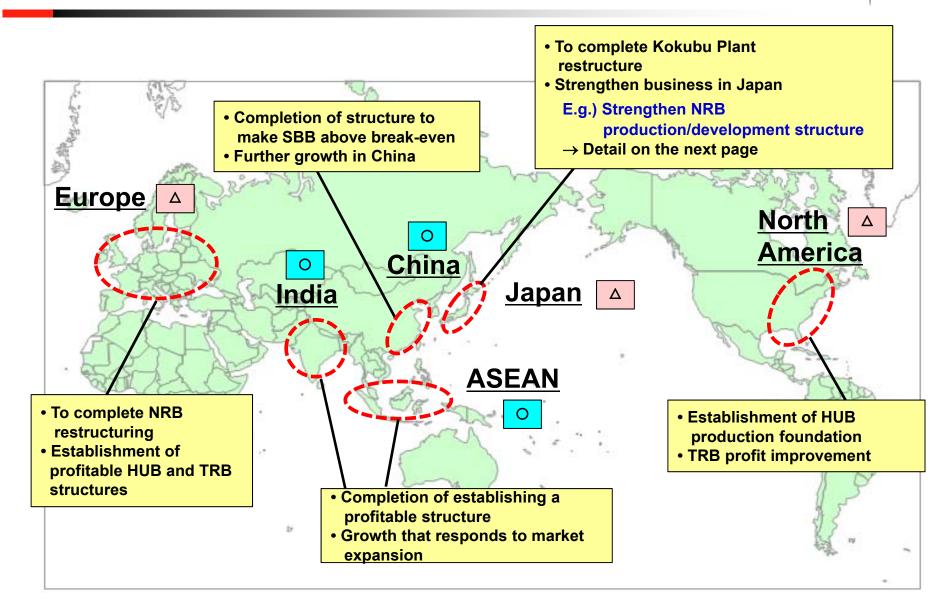
Actions for electrification

- Deepen JTEKT's strength, "engineering to change to low torque"
- Develop EV-specialized "Ultra-lightweight HUB"
- Develop engineering responding to demands for higher speed, lighter weight, better electrolytic corrosion resistance, and improved quietness

Have a clear view of the environmental changes and requirements, and accelerate the development/launch of products in response to automobiles' changes

3-1-4) Promotion of Regional Strategies





3-1-4) Strengthen Business in Japan (NRB)



Aim for the global top share and strengthen production and development bases in Japan

UKK (UTSUNOMIYA KIKI)'s Kiyohara new plant

Completion: March 2018 Operation: June 2018



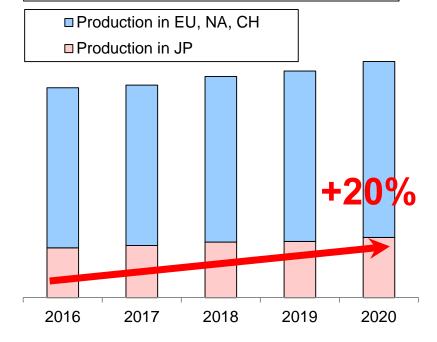
- Integration of product development and production engineering locations
- Efficient development of new generation products responding to environment changes (Low friction, longer life)





High performance resin cage

Target sales of NRB produced in Japan for 2020: 120% (vs. 2016)



3-1-4) Strengthen Production

Strengthen production and promote sophisticated plants

Improve plant *genba* power

- Improve productivity, streamlining
- Reinforce equipment maintenance/ Replace obsolete equipment

2) Strengthen cost competitiveness

- Reduce investment per unit
- Develop and share innovative engineering by process

3) Sophisticated plants

- Promote unmanned line
 - Automation of appearance check, transfer, packing, etc.
- Utilize IoE



Shift to sophisticated operation Assemble a team of few selected staff

[Promotion of unmanned line]



Introduction of unmanned line

[Utilization of IoE]



Productivity improvement through introduction of operation monitoring system45

3-1-4) Strengthen Sales

> Automobile OE

- Front-loading activities for electrification trends
- Strengthen proposals of new engineering and new products, expand future profit

> Industrial OE

 Shift resources to the markets and business of focus and important products (things/services)

> Aftermarket

- Reorganization of sales structures in Japan and overseas
- Region-based actions and creation of effect
- → Stronger sales network and product lineup to expand sales and profit

Market/Customer

Keep providing new values

Sales activities Front-loading, face contact sales

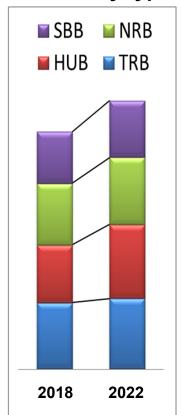
Sales strategy Automobile OE/ Industrial OE/ Aftermarket

Optimal organization/ Structure/ Human resource training

3-1-4) Strengthen Automotive Bearings (1)

Strengthen product potential utilizing JTEKT's strength

Sales by type



Growth in all types

TRB

- Manufacturing reform/optimum specifications for each region
- Pursue low torque and compact size



+ HUB

- Pursuit of low torque B-HUB
- Strengthen T-HUB

3rd generation T-HUB

NRB

- Ultra long-life, poor lubrication-resistant
- More compact, more lightweight



Long-life planetary shaft



Long-life thrust **NRB**

+ SBB

- Strengthen manufacturing competitiveness
- Launch high function products



Low torque ball bearing for diff.



High-axial ball bearing

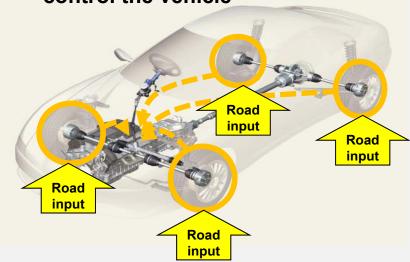
47

3-1-4) Strengthen Automotive Bearings (2)

Acceleration in engineering development for electrification/autonomous driving

HUB

- Contribute to autonomous driving with our sensing functions
 - **↓ Detect road input from HUB and** control the vehicle



 Promote development of compact/lightweight HUB for EV

SBB

 Develop high-function products foreseeing the changes to electrification

Support high-speed rotation Compact/Ultra lightweight Better electrolytic corrosion resistance **Better quietness**

[High-speed rotation SBB]

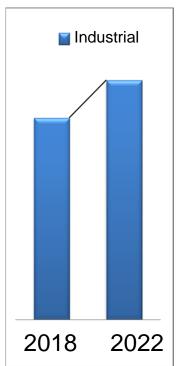




3-1-4) Strengthen Industrial Bearings

Product development responding to a variety of bearing utilization environments

◆ Sales of industrial BRG



Approx. 25% growth

Machine tools

- Low torque, high-speed
- Improved machining accuracy
- Long life

[Application]

Machine tool's spindle



HIGH ABILITY bearing series

Press release on Jan., 2018

Reducer

- Super thin, high rigidity
- Lightweight, compact
- High capacity



Super-thin deep groove ball bearings



- Industrial robot
- Medical device



Thin tapered roller bearings

Tunnel boring machine

- O.D. 7.7 m (Largest class in Japan)
- High reliability

[Application]

- Maglev bullet train
- Reservoir for flood damage



Slewing rim bearing

Press release on Aug., 2017

Special environment

- Low particle emission (Clean)
- Higher durability

[Application]

- Semiconductor manufacturing equipment
- FPD manufacturing equipment

Press release on July, 2017



(New)

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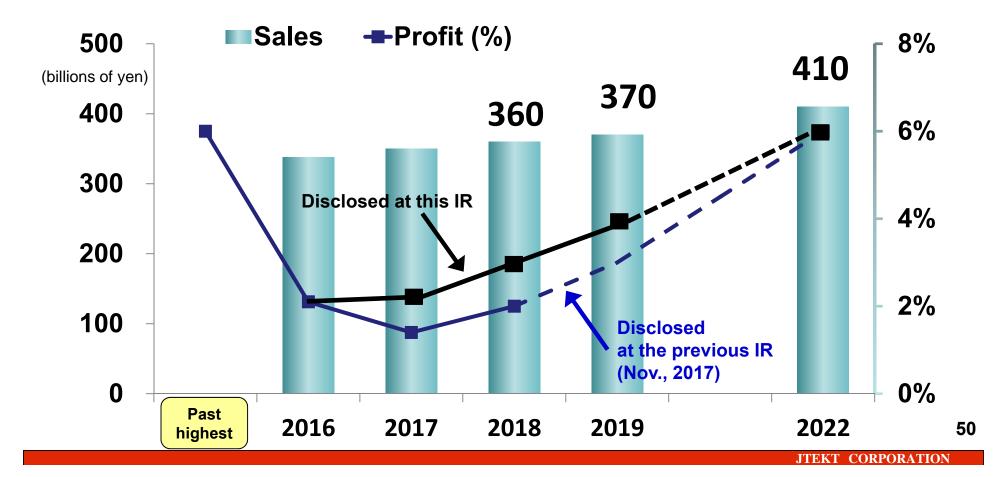
3-1-4) Forecast for Mid-term Business Plan for Bearings



Sales and Profit Forecast

¥95/US\$, ¥110/€, ¥16/yuan

To the values disclosed at the previous IR (Nov., 2017), made upward revisions of the target values, thanks to the increase in quantity and the results of each activity



5) Machine Tools & Mechatronics

3-1-5) Machine Tools & Mechatronics Business Growth Strategy



Provide the value in all phases of MONOZUKURI Establish the position as a total production line builder with IoE

Environmental changes

Intense market competition/ Changes in competitive foundation

- Intense cost competition (Added value decides the outcome)
- Changed mobility by environmental regulation
- Decline in workforce

Evolution of technology

- Removal processing → Addition processing
- Material change (Steel → Aluminum→Titanium, etc.)
- Evolution of IoT and smart factories

Viewpoint

Business strategy

- ✓ Flexible support for changes in the automobile market
- Strengthen support for non-automobile markets

Product strategy

√ Single unit → System unit Mono \rightarrow Koto (things; hardware) → (systems; software)

Improvement of system solution as a line builder

✓ Covering machining processes with JTEKT group technology

Global strategy

- ✓ Strengthen global sales/production/customer service systems
- Readiness with regional scale

Policy

Respond to EV / downsizing engine

Install IoT and Smart factory in our factory and customers factory

system engineering

Strengthen group cooperation



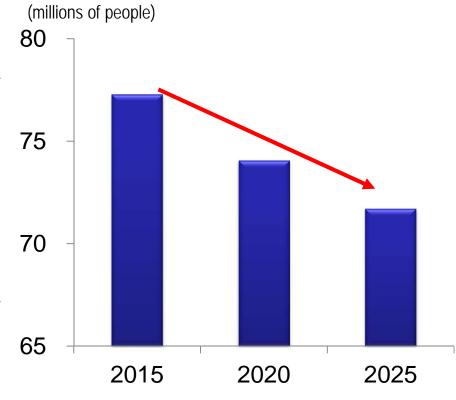
Automobile power trend

No internal combustion Solvential (millions of varieties) No internal combustion EV PHV HV GAS 0 2000 2010 2020 2030 2040 2050

Engine downsizing Increase in motors, batteries

Source: 2012, IEA_ETP "World automobile sales forecast"

Workforce



Decrease by five millions in ten years

(Source: National Institute of Population and Social Security Research, "Population Projections for Japan by Region" (2018))



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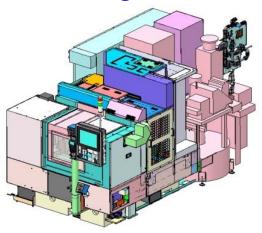
Responding to HEV/PHV (Downsizing of gasoline engines)

- Downsized turbo engine
- Increase in three-cylinder engines
- Making the cam shafts for the motorcycle into concave cams (India's tighter regulations for gas emissions)



For turbo shaft

Small grinder



Product lineup



Small-size eccentric shaft grinder (Reducer, compressor shaft)



Small-size cam grinder for passenger cars



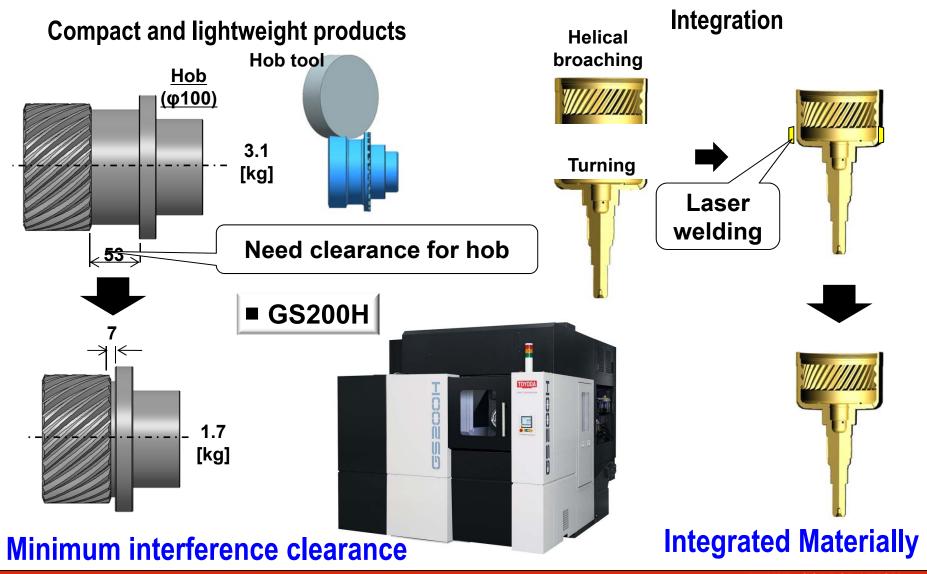
Small-size crank grinder for passenger cars



Small-size cam grinder for motorcycle

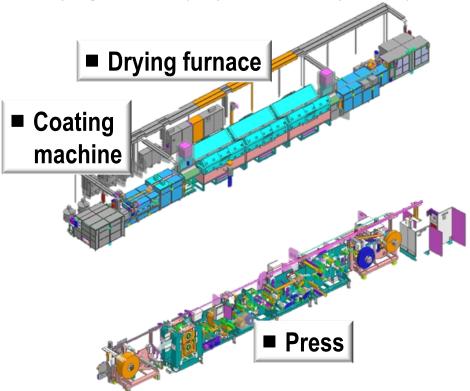
Speedy reactions to customers' requirement by Common platform

Gear skiving center brings innovation for products



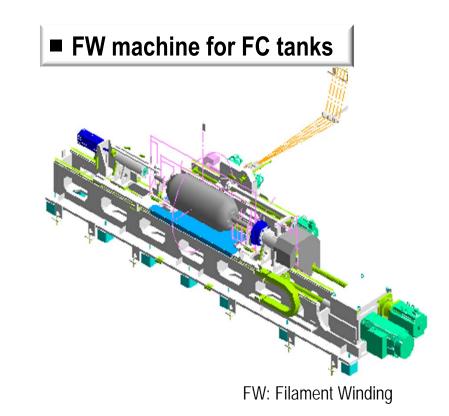
Response to EV

- Delivered equipment for lithium battery
- Kneader Coating machine Press
- Drying furnace (Koyo Thermo Systems)



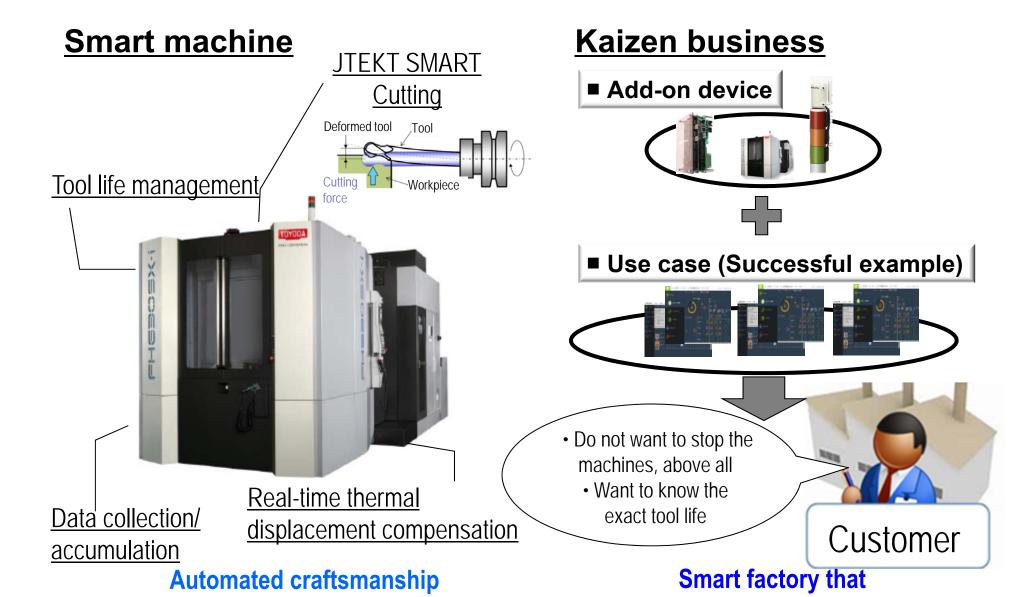
Response to FCV

- Delivered equipment for FCV
- Filament winding machine for FC tanks
- Coating machine
 Drying furnace (Koyo Thermo Systems)



3-1-5) Targeting to be a smart factory partner Koyo Town





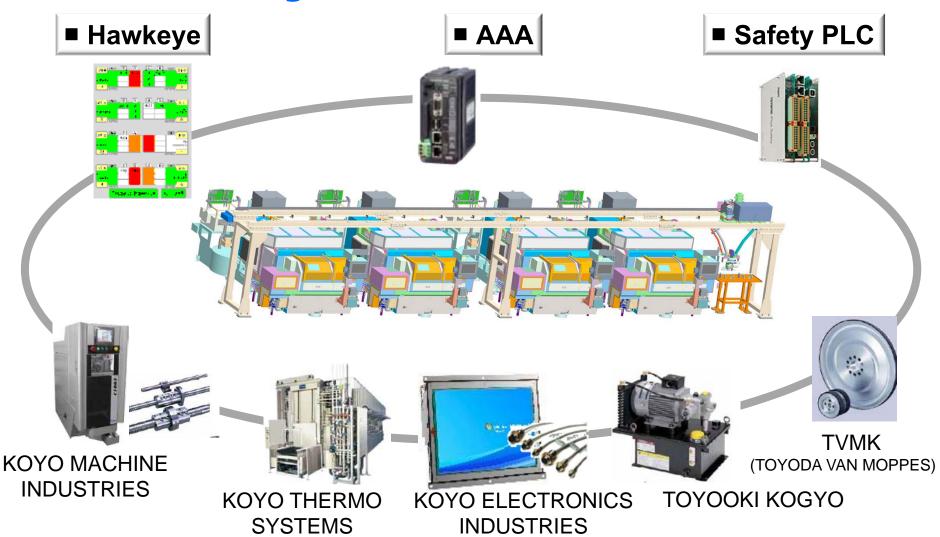
as a successor to veteran engineers

human takes the leading role

3-1-5) Targeting to be a smart factory partner Koyo Town



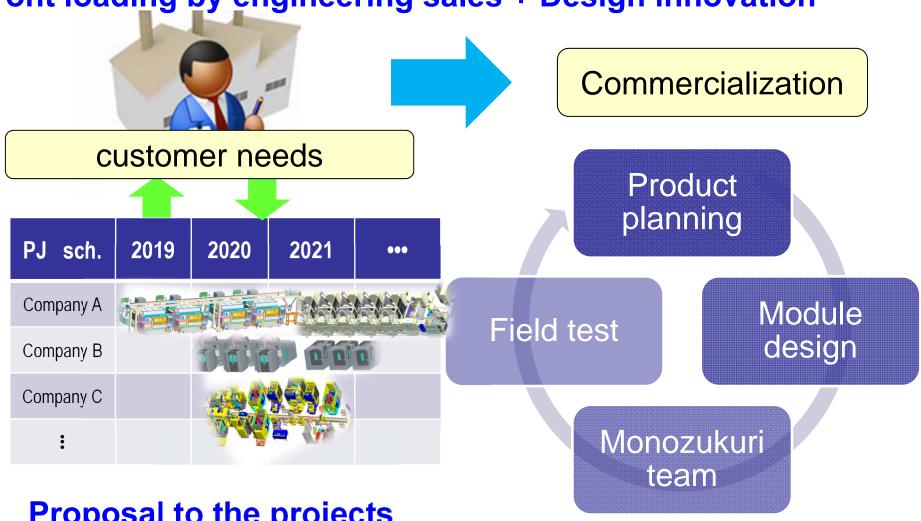
IoE deliver delight to customers



Strengthen group cooperation with unique technology and strength fields

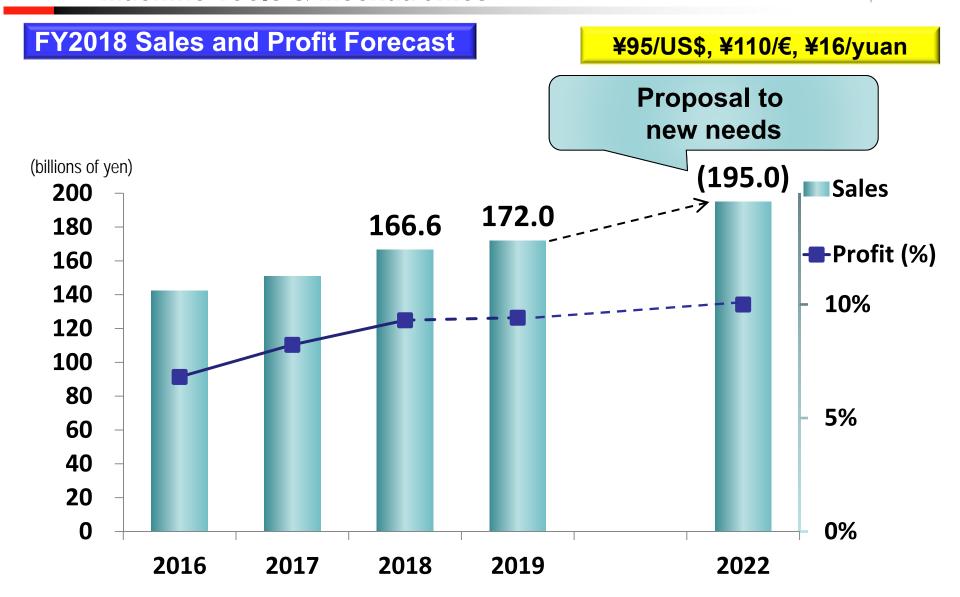
3-1-5) Improved Proposal Skill

Front loading by engineering sales + Design innovation



Proposal to the projects three years ahead

Faster commercialization



6) Actions for New Business

3-1-6) Actions for New Business (J-PAS)

Our first action: Start selling a power-assist suit from summer 2018

Social Issues (Needs)

- Aging society with fewer children
- Labor force shortage
- Labor accident increase
- Succession issue
- Women's advancement

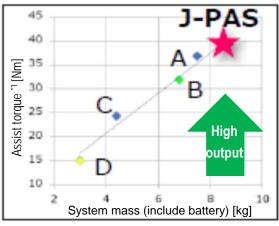
Our Strength (Seeds)

- Assist engineering (EPS)
 Synergy of the (EPS)
 existing engineering
- Tribology engineering (Bearings)
- Robotics engineering
- Compact/Lightweight
- Monozukuri/ Production worksite (Machine tools)
- Use of existing sales routes (Bearings, machine tools)





- Fine adjustable assist control that harmonizes with human motions
- Motor-assist that allows highest class output



*1: Assist torque comparison (specified by ISO)

- Personal-specialized vest Good fitting and easy to attach-and-remove
 - Offer power-assist suit series **Expand application to markets other** than manufacturing industry

3-1-6) Actions for New Business (LiC)

Koyo TOYODA

Lithium ion capacitor

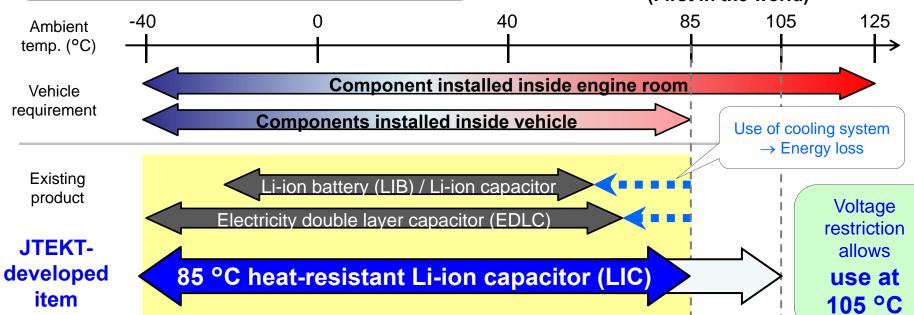
A capacitor that can be mounted to vehicle with no need of cooling

Planning to expand to various fields

- ★ Power source regeneration / Energy saving
- ★ Engine start-assist at low temperature
- ★ Backup power ★ Instantaneous stop assist
- ★ Emergency power
- ★ Power stability (Smart grid)



Service temperatures from -40°C to 85 °C (First in the world)

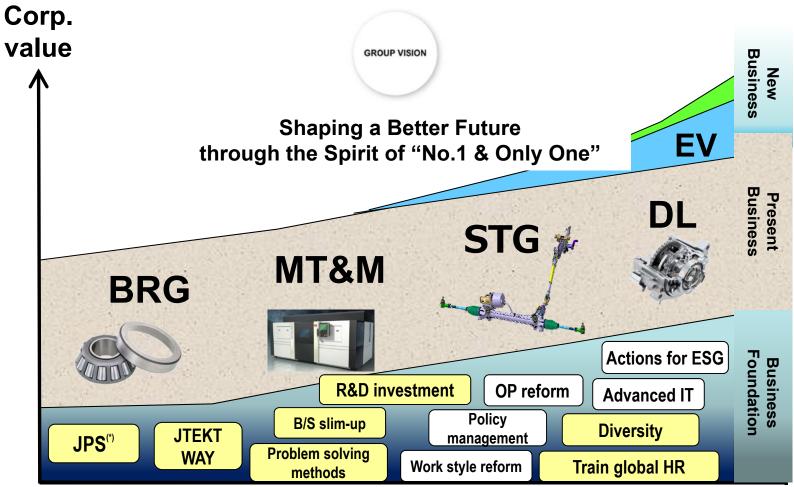




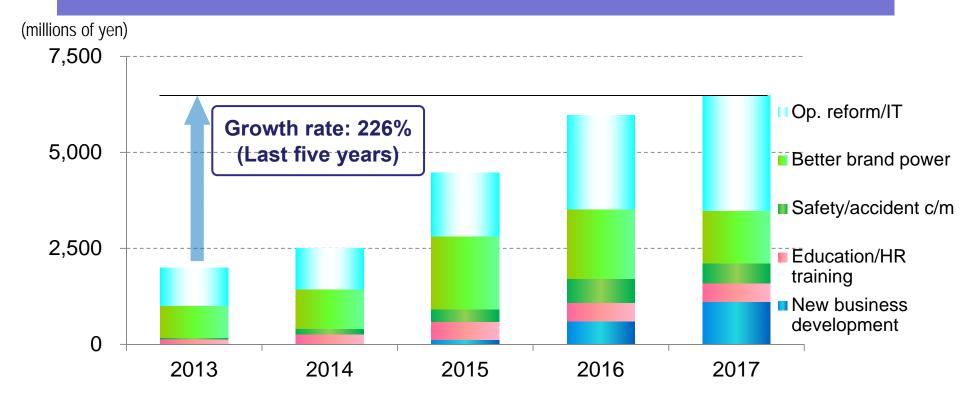
- Strengthen the fundamentals

3-2) Actions for Corporate Value Enhancement was a second second

With a healthy sense of crisis, promote building a business foundation that can solve a growth bottleneck self-reliantly and autonomously



Accelerate human resource development, investment for safety & accident prevention, and further operational reform & utilization of IT, that contribute to the establishment of the company's long-term business foundation



Trend of business foundation (fundamentals)-related cost

3-2) Improve Productivity Through Working Style Reform

Koyo

TOYODA

Reform awareness

Deliver the top management's message to all the employees

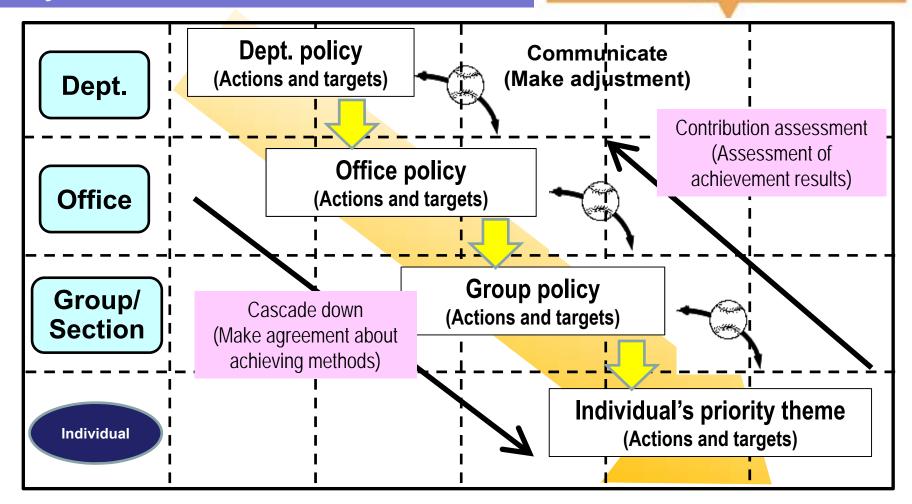
Share policy Town meeting MY21 activity Non-Japanese 5: Goal employees/Women's (Ideal) Operation advancement Working style **System** 4: Standardization Support for seniors/ (Offensive Kaizen) reform People with disabilities 3: Standardization Work-life balance (Defensive Kaizen) of (Childcare/Nursing-care) Reform of 2: Visualization Reform (Skill improvement) Flexible work style **Productivity** (Telework/core-less flex) 1: Visualization improvement (Filing) **Enriched training program** 0: Theme registry Skilled Maintenance Process **Production** Engineering **Engineering** workers personnel

Sophisticated working styles of skilled workers

3-2) Strengthen Policy Management

Koyo TOYODA

To actualize growth strategies (Mid-term plan), incorporate the policy management down to the priority themes of individual level.



3-2) Improve Workplace Management



- The target awareness level improved for the company vision, workplace mission, etc.
- Awareness gap among positions has decreased year by year.

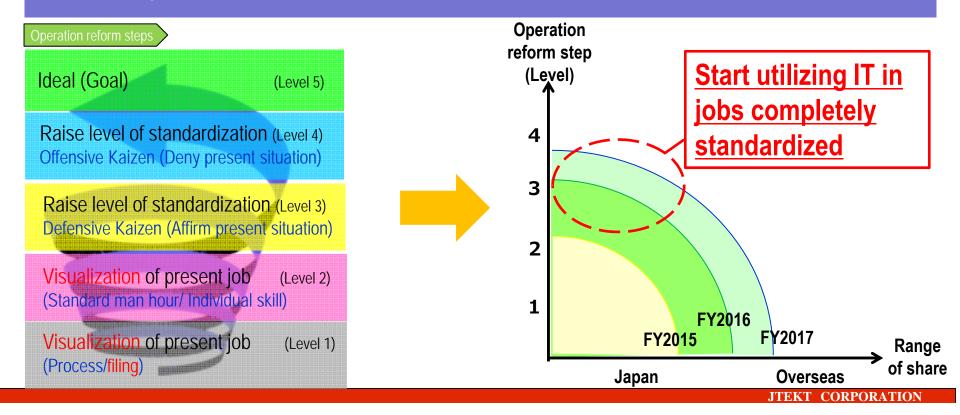


(*): Target awareness level: Percentage of the employees who selected top two selections/total six selections for the workplace management questionnaire (Total of 36 questions)

3-2) Operation Reform of Indirect Divisions

Promotion situation

- Consecutively expanding operation reform activity since FY2015 (30 -> 70 -> 132 departments).
 - Currently working on "Level 1 (Visualization) to Level 3 (Standardization)"
 - Start utilizing IT for Level 3 (Standardization)
- From FY2017, share to group companies in overseas and Japan.
- Start analysis of man-hour trend.



3-2) Actions for Sophisticated IT



Entering into the phase of effect reaping of intracompany utilization of IT from FY2018.

Mid-long term (Establishment of global operation)/ Short term (Fixed-cost reduction).

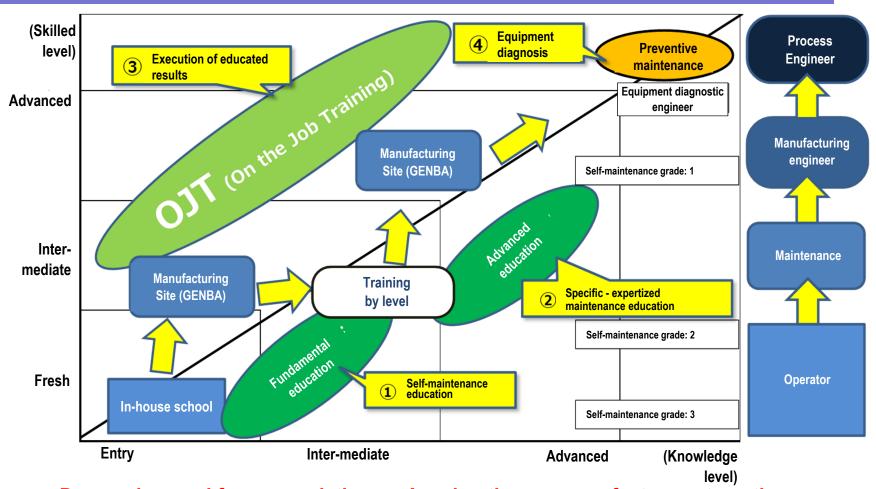


*1 Robotic Process Automation. Method to automate repetitive jobs

3-2) Work Style Sophistication for Skilled Workers



Certain Maintenance training program after joining JTEKT inhouse school.



<u>Decreasing workforce population → Acceleration on manufacture automation → Require higher level workers</u>

Koyo

3-2) Actions Considerate of ESG

- Promote activities using GPIF-selected ESG indices as benchmarks.
- Performing activities for in-company enlightenment and confirmation/strengthening of information disclosure.



• ESG index assessment for environment (E)

<CDP*1 assessment 2017>

Climate change: A-

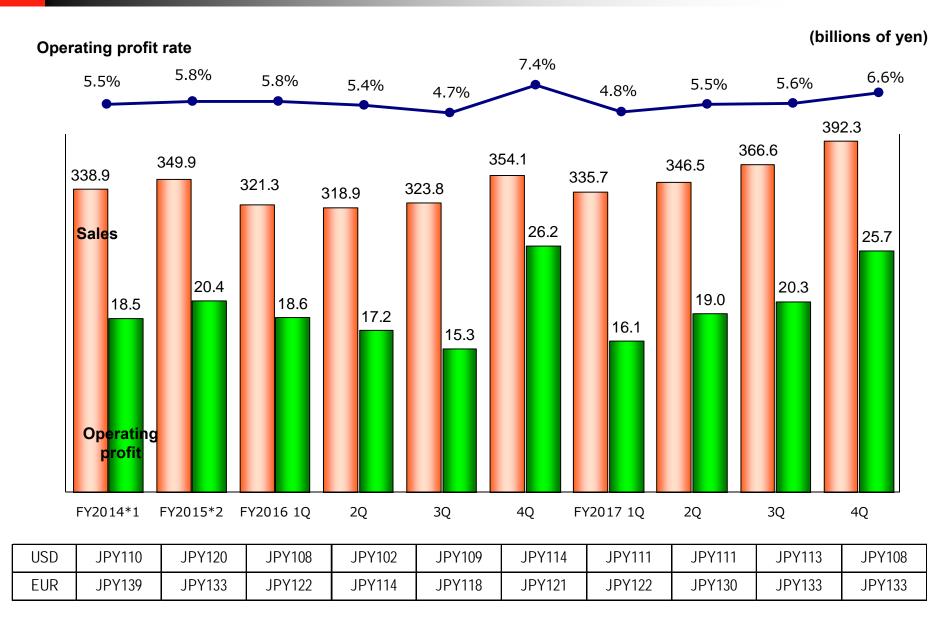
Water-resource management: B

*1) CDP: Carbon Disclosure Project A project to release information on the climate change strategy and greenhouse gas emissions

Thank you

(Reference) Quarterly Result Trend





^{*1, 2:} The FY2014 and FY2015 show the quarterly average. The same applies to the following slides.

(Reference) Sales Forecast by Business Units

(billions of yen)

FY2017 Full year (Actual)		FY2018 (Forecast)			Increase/	Increase/	
		_	1H	2H	Full year	Decrease	Decrease (%)
Mechanical components	Steering systems	711.8	364.0	392.0	756.0	+44.1	+6.2%
	Drivelines	145.4	76.0	81.0	157.0	+11.5	+8.0%
hanical	Bearings	422.3	200.5	213.5	414.0	(8.3)	(2.0%)
Meck	[Total]	1279.5	640.5	686.5	1327.0	+47.4	+3.7%
Machine tools and others	Machine tools	160.0	78.0	92.0	170.0	+9.9	+6.2%
	Others	1.5	1.5	1.5	3.0	+1.4	+97.1%
	[Total]	161.5	79.5	93.5	173.0	+11.4	+7.1%
נז	otal Sales]	1441.1	720.0	780.0	1500.0	+58.8	+4.1%

JIERI

(Reference) Sales Forecast by Company Locations

Koyo TOYODA

(billions of yen)

	FY2017 Full year (Actual)	FY2018 (Forecast)			Increase/	Increase/ Decrease
		1H	2H	Full year	Decrease	(%)
Japan	582.4	287.0	322.0	609.0	+26.5	+4.6%
Europe	220.7	112.5	123.0	235.5	+14.7	+6.7%
North America	298.2	138.0	146.0	284.0	(14.2)	(4.8%)
Asia/Oceania (Including India)	164.4	89.0	93.5	182.5	+18.0	+11.0%
China	146.9	79.5	81.5	161.0	+14.0	+9.5%
South America & Others	28.3	14.0	14.0	28.0	(0.3)	(1.2%)
[Total Sales]	1441.1	720.0	780.0	1500.0	+58.8	+4.1%

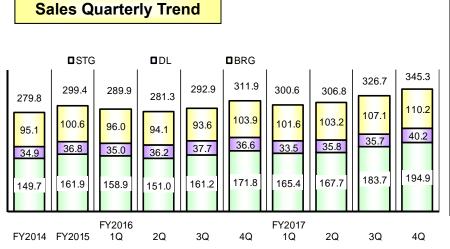
(Reference) Financial Results by Business (Mechanical Components)

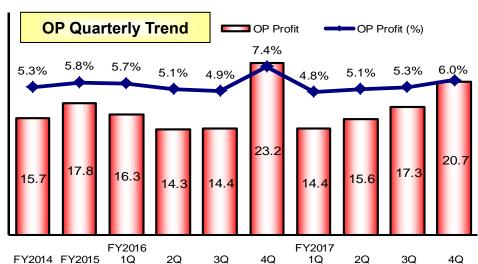


(billions of yen)

Mechanical components		FY2016	FY2017	Increase/ Decrease	Increase/ Decrease (%)
Steering systems	Sales	642.9	711.8	+68.8	+10.7%
Drivelines	Sales	145.5	145.4	+0	(0.1%)
Bearings	Sales	387.6	422.3	+34.7	+9.0%
	Sales	1176.0	1279.5	+103.5	+8.8%
[Total]	OP Profit	68.2	68.2	+0	+0.0%
	OP Profit (%)	5.8%	5.3%		

* "Deletion is omitted.





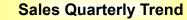
(Reference) Financial Results by Business (Machine Tools & Others)

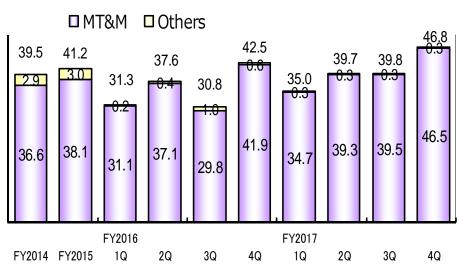


(billions of yen)

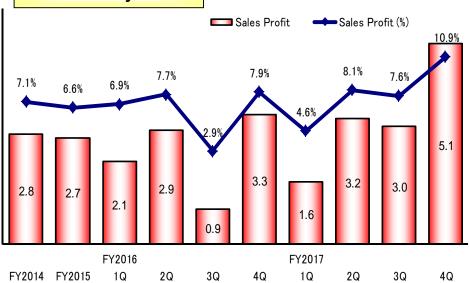
Machine tools and others		FY2016	FY2017	Increase/ Decrease	Increase/ Decrease (%)
Machine tools	Sales	139.9	160.0	+20.0	+14.4%
Others	Sales	2.2	1.5	(0.7)	(33.1%)
	Sales	142.2	161.5	+19.3	+13.6%
[Total]	OP Profit	9.1	12.8	+3.6	+39.8%
	OP Profit (%)	6.5%	8.0%		







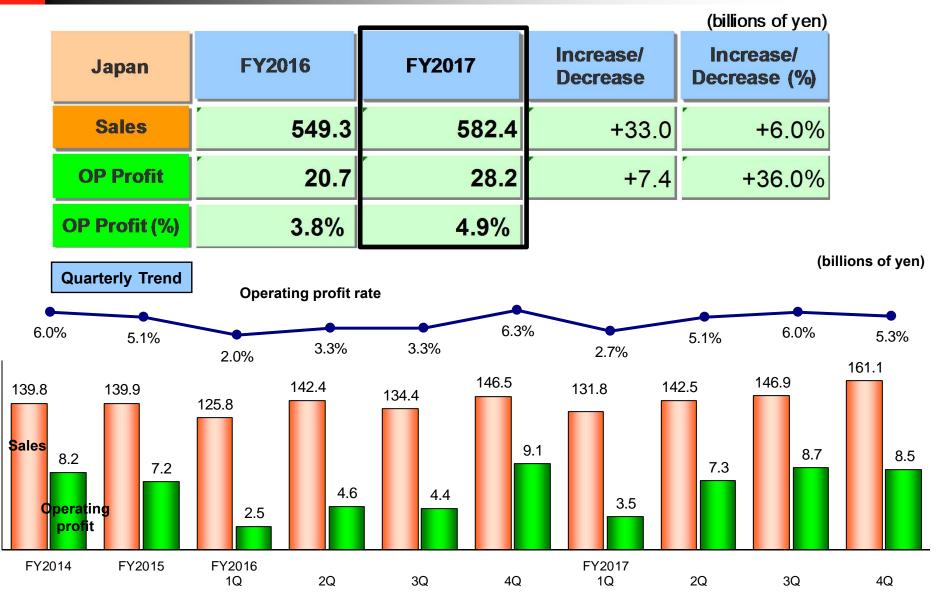
OP Quarterly Trend



ITEKT

(Reference) Financial Results by Region (Japan)

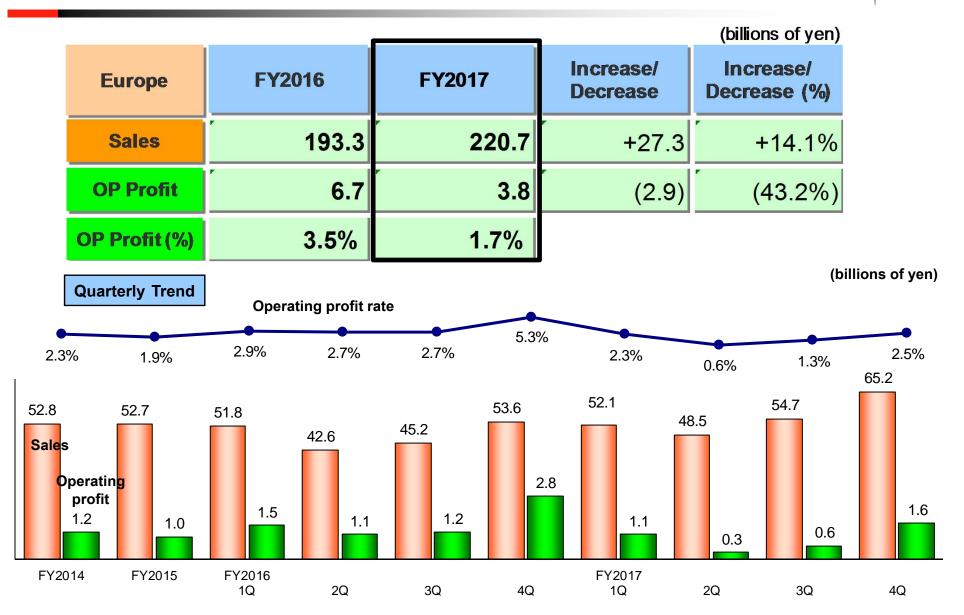




(Reference) Financial Results by Region (Europe)

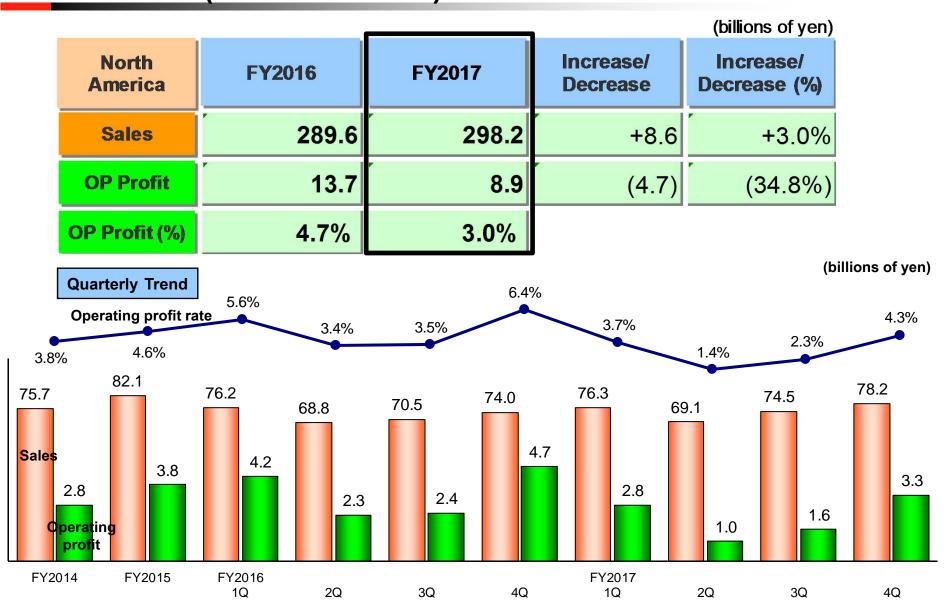






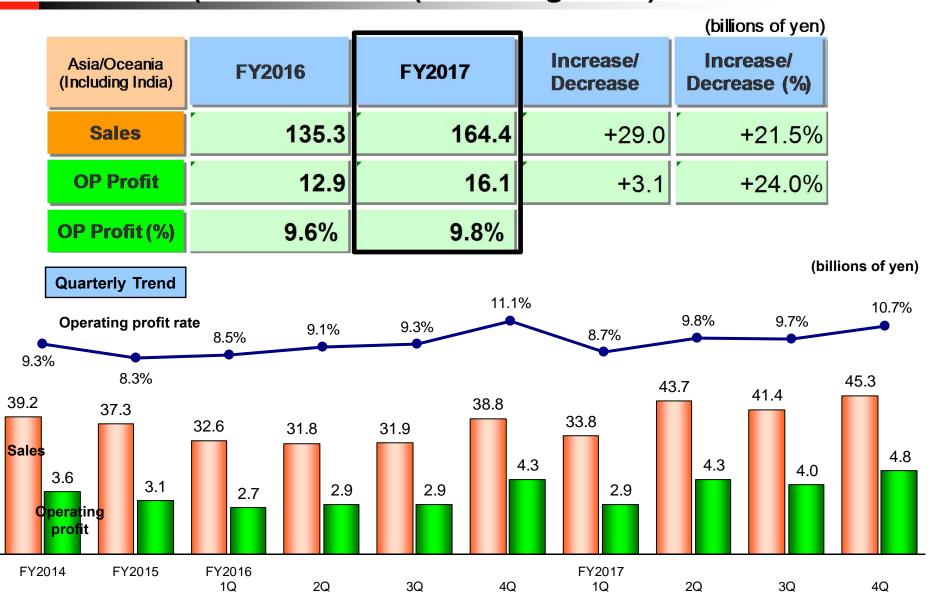
(Reference) Financial Results by Region (North America)





(Reference) Financial Results by Region (Asia/Oceania (Including India)





(Reference) Financial Results by Region (China)



