

# INDUSTRY & MOBILITY BUSINESS AREA 2024

## Industry & Mobility Business Area

MITSUBISHI ELECTRIC CORPORATION

May 29, 2024



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# 1

## Executive Summary

# Executive Summary

Aim to achieve revenues of ¥1.7 trillion and an operating profit margin of 9% or more in FY2026 through structural reforms of the automotive equipment business, promotion of growth strategies for the FA systems business, and developing synergies across the Industry & Mobility Business Area.

## Growth Target

		FY2024 Actual	FY2025 Plan	FY2026 Target
<b>Mobility</b>	Revenue	¥944.1 bn	¥900.0 bn	¥0.8 trillion+
	Operating profit margin	3.3%	3.0%	4%+
<b>Industry</b>	Revenue	¥766.4 bn	¥770.0 bn	¥0.9 trillion+
	Operating profit margin	11.6%	14.3%	15%+

Based on FY2024: ¥145/\$, FY2025: ¥140/\$, FY2026: ¥130/\$

## Mobility (Automotive Equipment Business)

- Steadily promote structural reforms, including strengthening the business foundation under the new company. Prepare for a period of CASE\* business expansion in FY2031 and beyond by promoting business portfolio replacement through partnerships with external parties.
- Aim for revenues of ¥0.8 trillion and an operating profit margin of 4% or more in FY2026 through stable monetizing its Resilient Businesses.

## Industry (FA Systems Business)

- Maximize the value provided by the FA Systems Business by concentrating growth investments in Key Growth Businesses, the FA Digital Solution business area, and by restructuring the business portfolio from the best owner's perspective.
- By executing various growth investments and initiatives, we aim to achieve revenues of ¥1 trillion and an operating profit margin of 20% in FY2028, based on the latest demand environment.

\*CASE: Connected, Autonomous, Shared & Service, Electrified (auto industry trends)

**Industry**

- Contribute to technological innovation
- Realize next-generation manufacturing
- Solve labor shortages and skills loss

**Mobility**

- Contribute to carbon neutrality
- Provide comfortable mobility opportunities
- Eliminate traffic accidents

**Support future manufacturing and comfortable mobility with our core components and digital technologies**

**Strengthen value proposition of core components to globally growing industries**

**Growth and expansion with partners who are expected to create synergies in the CASE area**

**Establish a FA Digital Solution business model**

**Review the business portfolio to focus on areas with strengths that address changes in the business environment**

Real-time control

Power electronics technology

Motor technologies

High fill-factor coil winding technology

Monitoring technologies



# 2 Mobility

Began operation of the new company in April 2024. Steadily advancing the four pillars of our business portfolio strategy.

Business Portfolio Strategy		Progress (Compared to IR of spring 2023)
1	CASE (xEV/ADAS*)-related business: Grow through synergies with partners	Completed basic agreement on xEV collaboration
2	Business leveraging strengths, such as EPS (Resilient Business): Focus on strengths to increase profitability	Achieved profitability improvement through selection and concentration
3	Businesses with issues, such as car multimedia: Promptly discontinuing for business transformation	Developed details of a scheme to terminate businesses
4	Contribution to corporate growth businesses: Apply manufacturing capability and assets to growth areas	Embody plans to convert global production sites for use in FA Control Systems and A/C & Refrigeration Systems Businesses

\*ADAS: Advanced Driver Assistance System

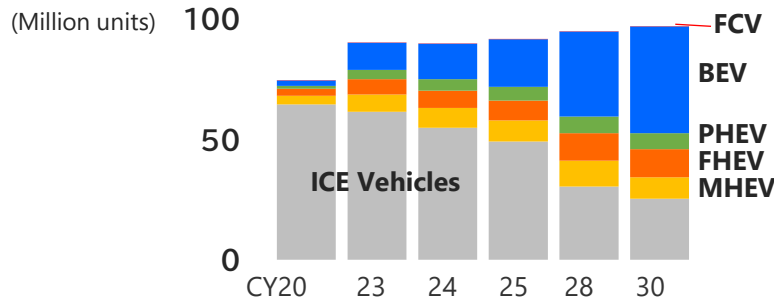
# Market Environment and Strengths of Automotive Equipment Business

A once-in-a-century period of change. Amid the ongoing shift to EV, we will stabilize revenues by responding to diverse customer needs in CASE-related and Resilient Business. We will refine technology assets that are our strengths and promote collaboration with partners.

## Market Environment — xEV market —

Forecast of global automobile production by powertrain

Source: As of Feb 2024, S&P LV Powertrain includes our forecasts



## EV Policies of Each Country

- **U.S.:** More than 50% of new vehicles to be PHEV, BEV, FCV by 2030 (the Biden administration, 2021)
- **Europe:** In addition to supporting the purchase of EVs in each country, the government plans to ban the sale of ICE vehicles from 2035 onwards
- **China:** Restrictions on ICE vehicles while providing subsidies and tax breaks for EVs

FCV: Fuel Cell Vehicle  
 BEV: Battery Electric Vehicle  
 PHEV: Plug-In Hybrid Electric Vehicle  
 FHEV: Full Hybrid Electric Vehicle  
 MHEV: Mild Hybrid Electric Vehicle  
 ICE: Internal Combustion Engine

## Strengths of the Automotive Equipment Business: Technology Assets

### Power electronics technologies

Motor control (low loss driving control)  
 Small power module design (cooling technologies)

### Sensing technologies

Biosensing and high-precision composite positioning technologies

### Motor technologies

High fill-factor coil winding motors

### Automation and miniaturization technologies

High-speed automation, miniaturizing production design, composite assembly

### Wireless communication technologies

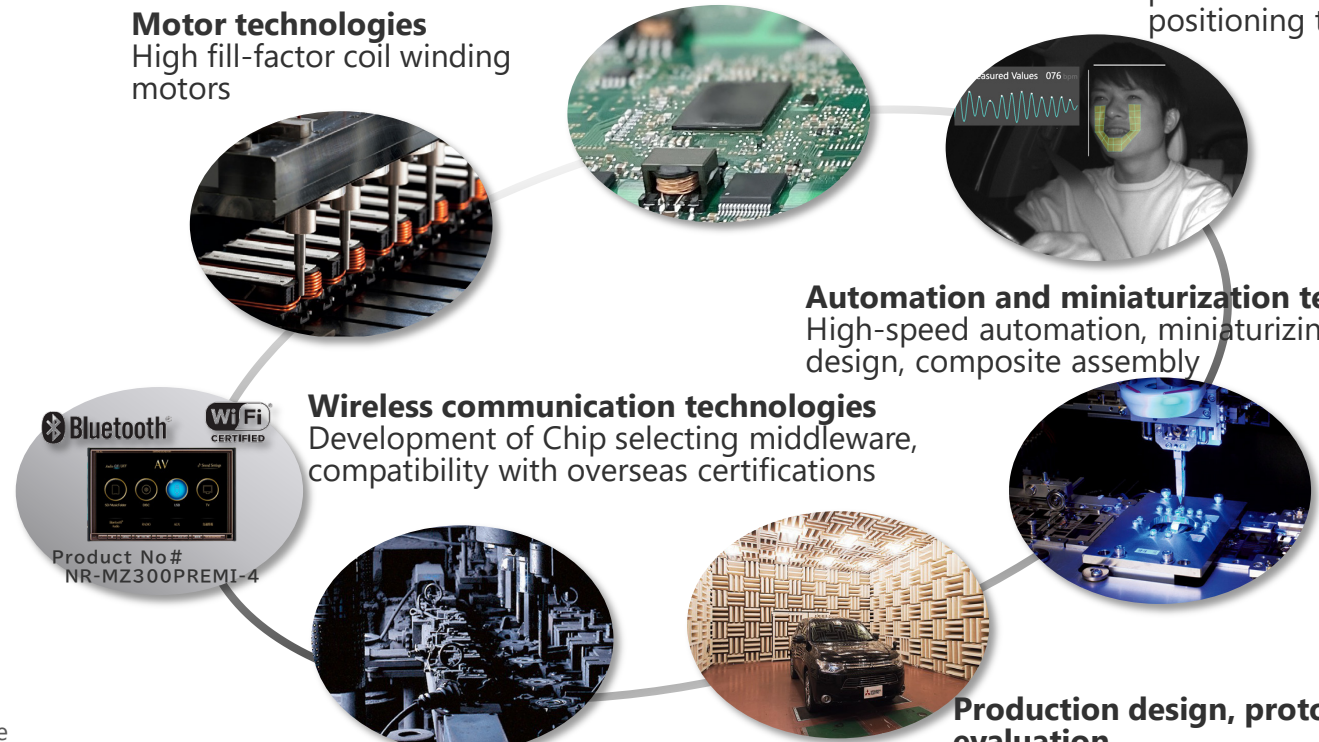
Development of Chip selecting middleware, compatibility with overseas certifications

### Processing technologies

Metal mold, iron core press, resin molding, cold forging

### Production design, prototype evaluation

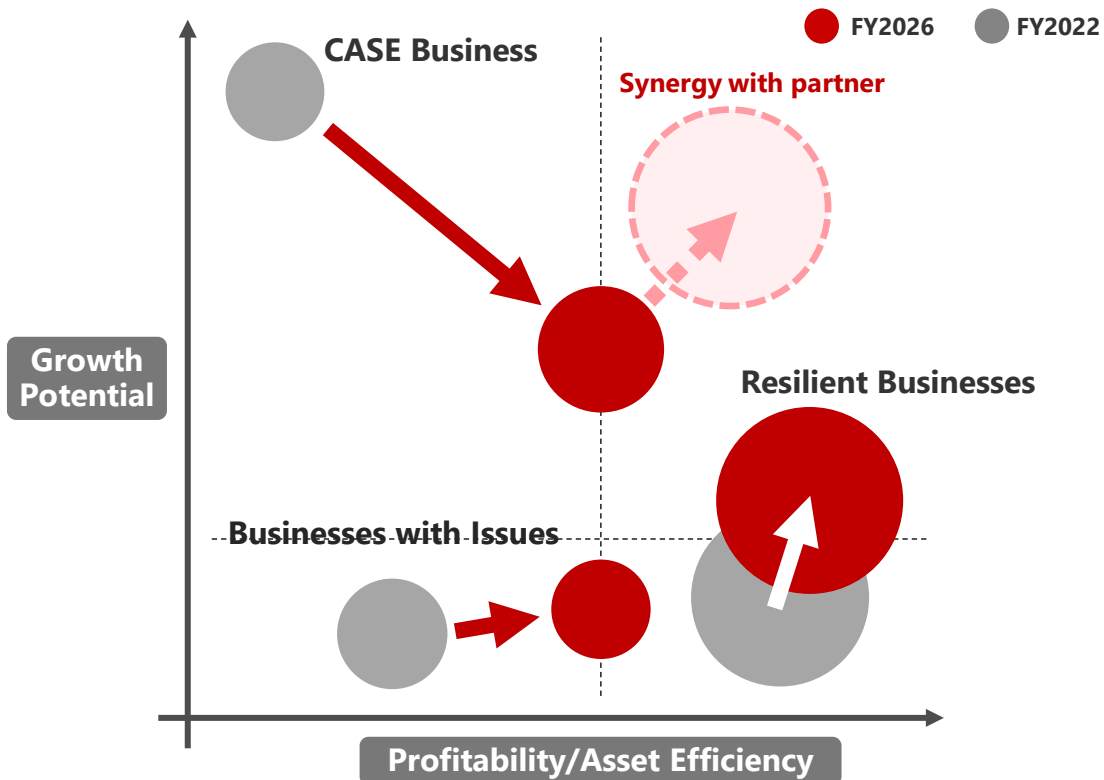
Processing machine, testing equipment, trial production system and material analysis





The new company clarifies the responsibility structure for each business. Based on a portfolio strategy, we operate business speedily. We will promote optimal measures according to business positioning, such as by implementing partnering strategies, narrowing down focus areas, and finalizing termination schemes.

### Transformation of Business Portfolio [FY2022 →FY2026]



\*Size of circle: Revenue

### Concrete Measures

#### CASE Business

##### Regrowth through xEV partnering strategy execution

- Launch partnerships and collaborations with external partners, creating synergies
- Secure profitability through the optimization of a standard lineup

#### Resilient Businesses

##### Narrow down focus areas with emphasis on profitability

- ICE business: Specialize in segments where customers recognize our value. Optimize fixed costs according to the business scale.
- Businesses that take advantage of strengths such as EPS and body control ECUs: Strengthen software technologies that control complex controls.

#### Businesses with Issues

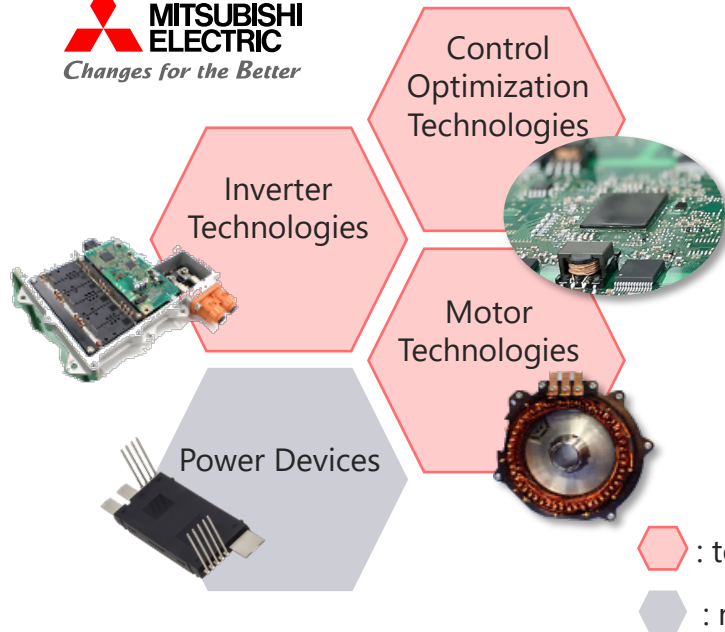
- Finalize detailed scheme for early termination and accelerate discussions with some customers

ECU: Electronic Control Unit

# Key Strategy (xEV Business)

Reached a Basic Agreement to Establish a Joint Venture Company for the Products of Next Generation Electric Vehicles with AISIN. Respond to the diversifying needs for vehicle electrification, ultimately to contribute to global carbon neutrality.

## Strengths of Mitsubishi Electric Group



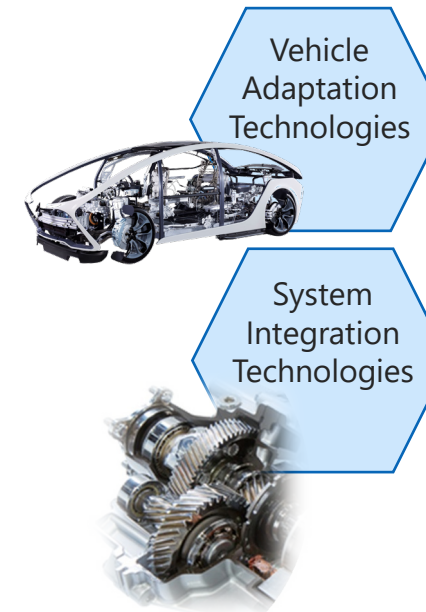
**Power electronics technologies**



**Integration technology**

**Advance the strength of technologies of both companies**

## Synergy with AISIN

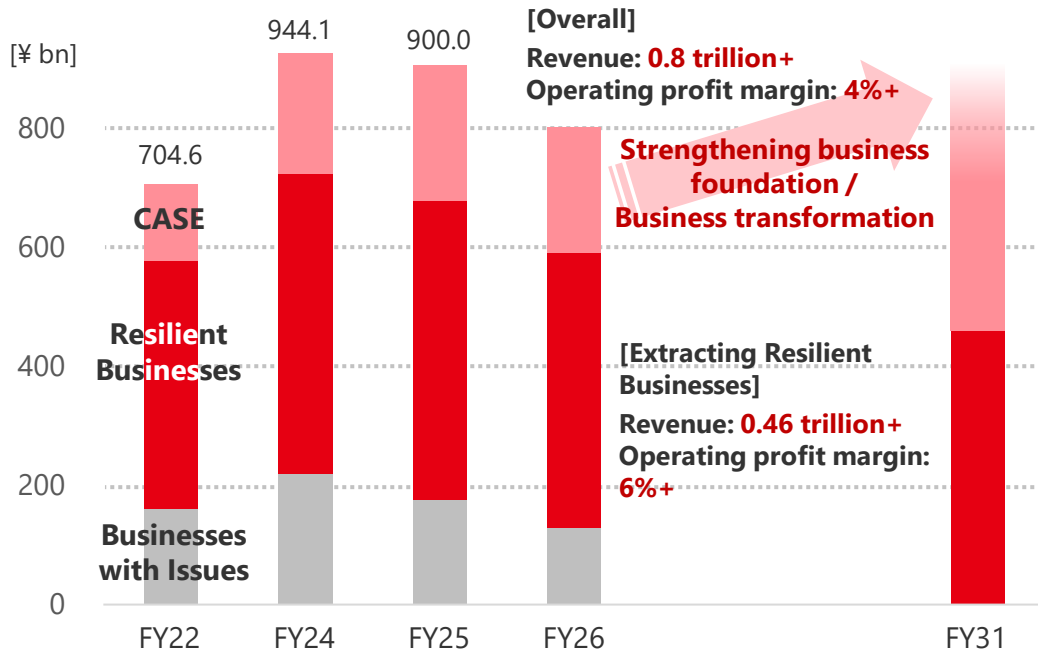


## Scope of JV

**Develop, produce and sell motors, inverters, and their control software, which will be optimized for vehicles and relevant systems and used in next-generation EVs, including BEV, PHEV, and HEV.**

From FY2025 onwards, we will move into the phase of implementing structural reforms and harvesting the benefits. We will aim to strengthen profitability by strengthening business foundation and to achieve regrowth through business transformation.

## Consolidated Revenue (Automotive Equipment Business)



## Major Measures to Strengthen the Business Foundation

### Complete the portfolio strategy by strengthening the business management system

- Promote speedy business operations in line with the portfolio strategy by strengthening marketing capabilities, promoting DX, and shifting resources in the new company

### Restructure the global production system

- Embody the roadmap for the utilization of U.S. factories in growth businesses such as A/C & Refrigeration Systems and FA Control Systems. Aim to streamline production yards at overseas bases.

## Launch partnering strategy

- Reached a Basic Agreement to Establish a Joint Venture Company for the Products of Next Generation Electric Vehicles with AISIN CORPORATION

# 3 Industry











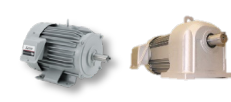




# Business Structure

Contributing globally to manufacturing with effective businesses offering diverse products, services, and solutions, backed by over a century of expertise.

**Automating** the World

## FA Systems Business Product Lineup

■ Key Growth Businesses   ■ Resilient Businesses

Control and Drive Products	FA Control Systems	 <b>PLC</b>	 <b>Servo</b>	 <b>CNC</b>
	Other Control and Drive Products	 <b>HMI</b>	 <b>Inverter</b>	 <b>Robot</b>
Processing Machines	 <b>Laser Processing Machine</b>	 <b>Electric Discharge Machine</b>	 <b>Laser Processing Machine for CFRP*</b>	 <b>Metal 3D Printer</b>
Rotary Motors, Power Distribution Control Equipment	 <b>Rotary Motor</b>	 <b>Power Distribution Control Equipment</b>		
FA Digital Solution	 <b>Consulting</b>	 <b>Software</b>	 <b>Remote Service</b>	

\*Laser processing machine for Carbon Fiber reinforced plastics

## FA Systems Business Assets

### Sales & service assets

Sales network  
Global **90** countries+

Service network (FA Center)  
**21** countries  
**43** bases

### Partner assets



**1,122** companies



**414** companies



**4,304** companies

### Customer assets



Number of units in operation

**29 million**

Registered members on FA website

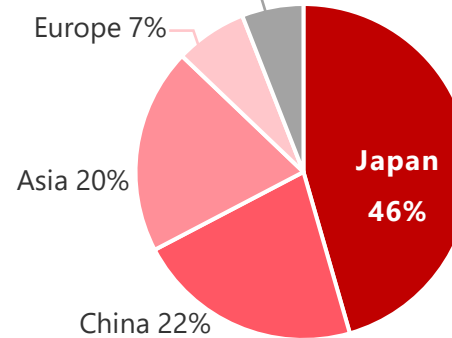
**1.52 million**

Number of social media followers

**1.09 million**

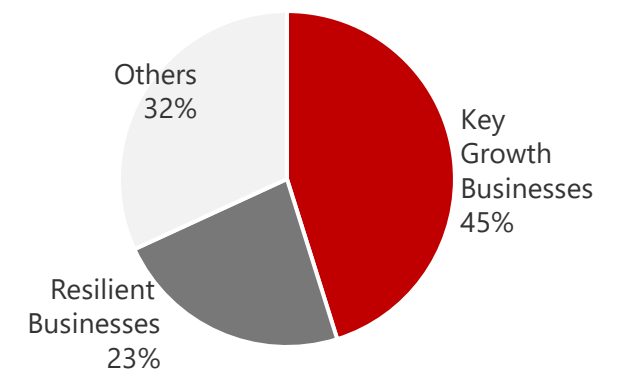
## Revenue Ratio by Region

North America 6%   \*FY2024 Result



## Revenue Ratio by Business

\*FY2024 Result



# Position in the Industry and Demand Environment

As a leading manufacturer in the field of real-time control, we will strengthen our value proposition for the globally expanding FA market.

## Positioning



PLC



Servo



CNC

- **Leading company in Asia in the field of real-time control**
- **One of the top 3 leading companies in the world in the PLC, servo, and CNC business areas**

## Market Environment

- **Growing importance of a robust supply chain that can respond to VUCA**
- **Transition to manufacturing that utilizes digital technology and data**
- **Changes in the competitive environment in the Chinese market with the rise of Chinese FA manufacturers**

## Demand Environment (FY2025-2026)



Semiconductor

**Continuous demand for generative AI and servers. Demand for memory and other components is expected to recover and increase over FY2026.**



Smartphone/EMS Display

**Demand is increasing for certain processes for smartphones in China. Increased relocation of production to India and Vietnam.**



Automotive/Battery

**There is uncertainty around BEVs, however, demand for automobiles overall, including HEVs, is strong. Battery investments in China are saturated, but investments in Europe and the U.S. will expand in the mid-term.**



Data Center

**Steady investment continues as digitalization and generative AI become more prevalent.**



Food and Beverage

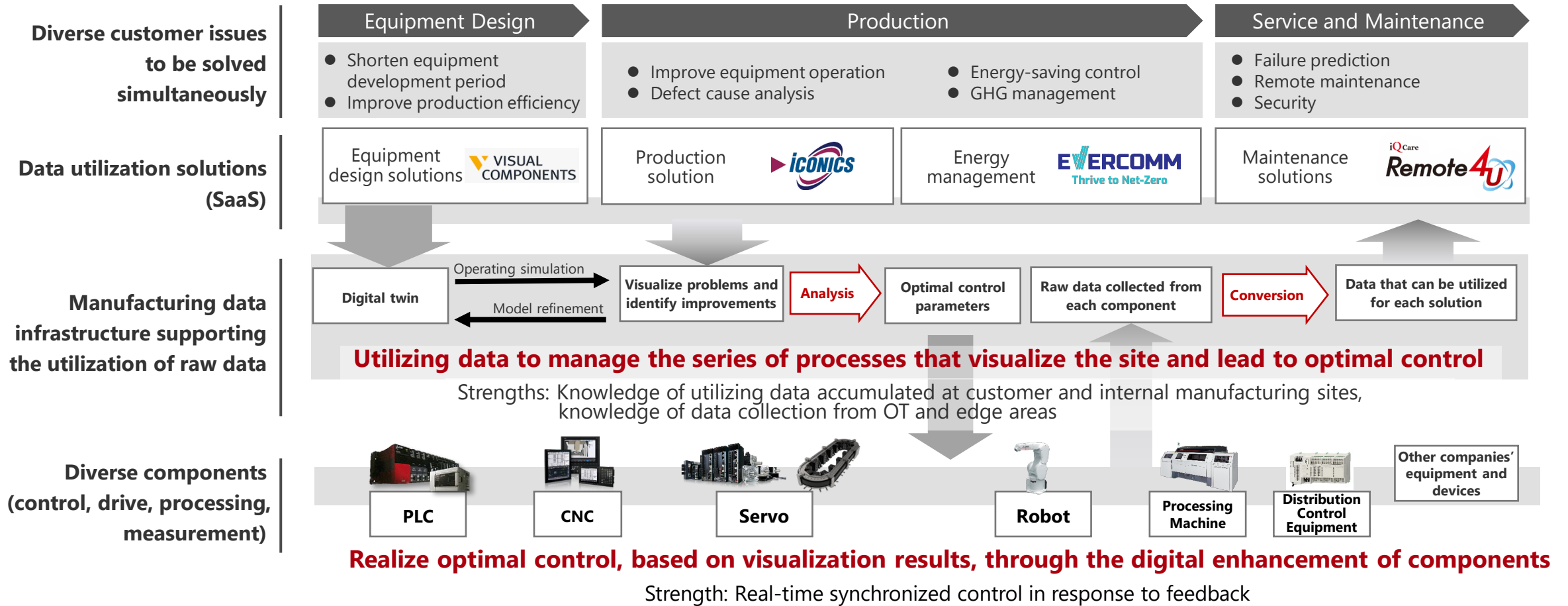
**Stable investments will continue over the mid-term due to new demand from growing environmental awareness.**

Continuously enhance business competitiveness by making aggressive growth investments in Key Growth Businesses and the FA Digital Solutions area, while also strengthening business operations in China.

	FY2022-FY2024 Results	FY2025-FY2026 Initiatives
Strengthen core components of Key Growth Businesses	<p><b>Utilize M&amp;A and strategic investments to gap-fill missing parts</b></p> <ul style="list-style-type: none"> <li>Investment in MOVENSYS (Mar 2023): Strengthening motion software for servo business</li> </ul>	<p><b>Enhance next-gen products with advanced features and scalability</b></p> <ul style="list-style-type: none"> <li>Linear track market launch (FY2025)</li> <li>Increased investment in Realtime Robotics (May 2024): Strengthening controller products</li> </ul>
Establish a FA Digital Solution business model	<p><b>Strengthen and acquire digital talent and technology</b></p> <ul style="list-style-type: none"> <li>Organized specialized DX unit for FA (170+ personnel as of Apr 2024)</li> <li>Executed six M&amp;A / investments, mainly in software and AI</li> </ul>	<p><b>Accelerate efforts to quickly launch the business</b></p> <ul style="list-style-type: none"> <li>Continue strengthening digital talent and technology, concentrate resources on Yokoyama (Oct. 2024)</li> <li>Start industrial cloud service (FY2025)</li> </ul>
Strengthen global manufacturing system	<p><b>Fundamental expansion of production capacity</b></p> <ul style="list-style-type: none"> <li>New factory in Owari-asahi: Building 1 (FY2026) and Building 2 (FY2028)</li> <li>Started operation of new factory in Talegaon, India (Dec. 2023)</li> </ul>	<p><b>Accelerate localization of production to mitigate geopolitical and natural disaster risks</b></p> <ul style="list-style-type: none"> <li>Establish No. 4 Production Building in Dalian, China (FY2026)</li> <li>Strengthen ASEAN manufacturing base: New factory in Vietnam (Jun 2024)</li> </ul>
	Recognized Issues	FY2025-FY2026 Initiatives
Strengthen business competitiveness in the most important region, China	<ul style="list-style-type: none"> <li>Intensifying competitive environment due to the rise of local Chinese FA manufacturers</li> <li>Acceleration of Chinese equipment manufacturers and end-users, especially in growth industries, to expand their operations outside of China</li> </ul>	<p><b>Fundamental reinforcement of China business structure</b></p> <ul style="list-style-type: none"> <li>Autonomous business management system in China, including product planning and development</li> <li>Consider collaboration with local vendors</li> </ul> <p><b>Strengthen utilization of global bases for Chinese customers expanding outside of China</b></p> <ul style="list-style-type: none"> <li>Assign Chinese staff to global service and sales bases to enhance local support and Spec-in for Chinese customers</li> </ul>

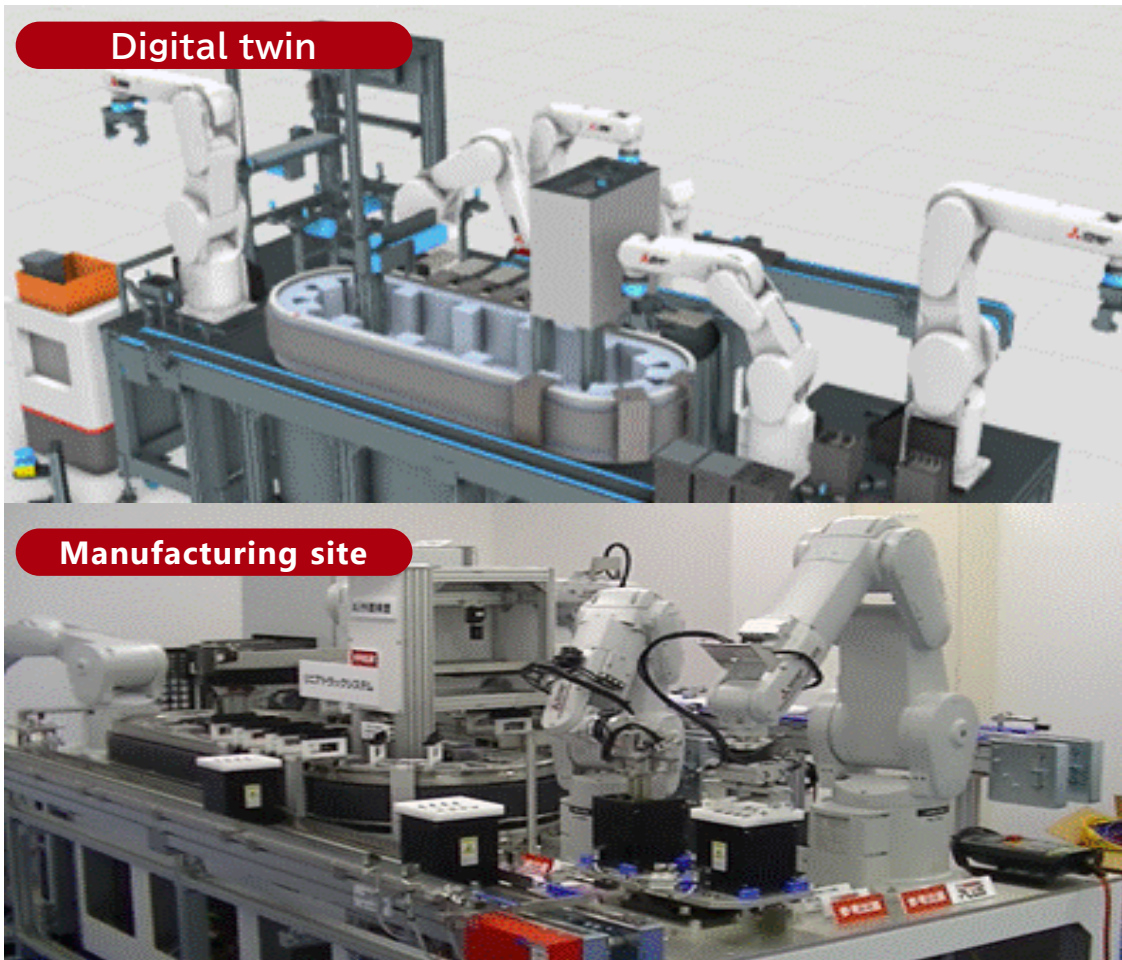
# FA Digital Solution

Strengthening the manufacturing data infrastructure to support the utilization of raw on-site data obtained from various components. Visualization and optimal control of components by solution area to simultaneously solve complex issues at manufacturing sites.





## Digital Twin Utilization Example



### Complex issues to be resolved:

Increased productivity and energy efficiency

#### Control optimization using a digital twin

- Quickly perform operational checks during the equipment design phase
- Accurately simulate changes in productivity and energy consumption depending on operating conditions
  - Productivity bottleneck analysis
  - Visualization of energy consumption patterns

Update and improve accuracy of digital twin models

Extract optimal operation patterns from simulation results

#### Acquire raw data on equipment operating status from each component

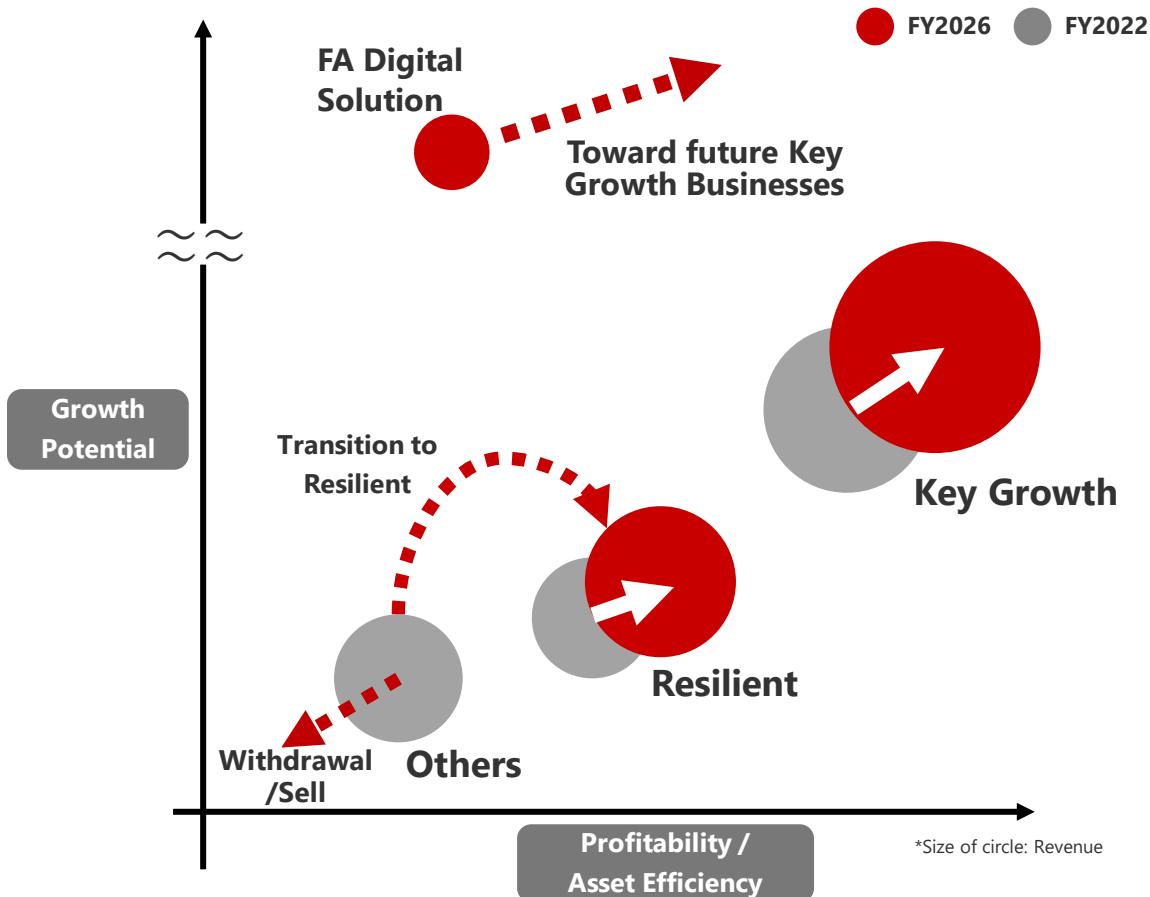
- Equipment operating data
- Product inspection data
- Jig/equipment condition data
- Current data of each device

#### Optimize line control

- Program changes linked with production status
- Energy-efficient operation

Maximize the value of the FA Systems Business by restructuring the portfolio to realize the ideal business form from the perspective of the “best owner”.

## Portfolio Transformation



## Concrete Measures

### Key Growth Business

#### Further business growth through continued growth investment

- Strengthen the region-specific product lineup
- Develop enhanced next-gen products with advanced features and scalability

### FA Digital Solution

#### Aggressive investment towards future Key Growth Businesses

- Active investment in digital talent and technology to continuously strengthen the manufacturing data infrastructure and data utilization solutions

### Resilient Business

#### Selective investment of resources to achieve 15%+ operating margin

- Expand production of inverters to contribute to carbon neutrality
- Expand value proposition of processing machines by enhancing operation and maintenance services

### Others

#### Businesses structural reforms including withdrawal and sell

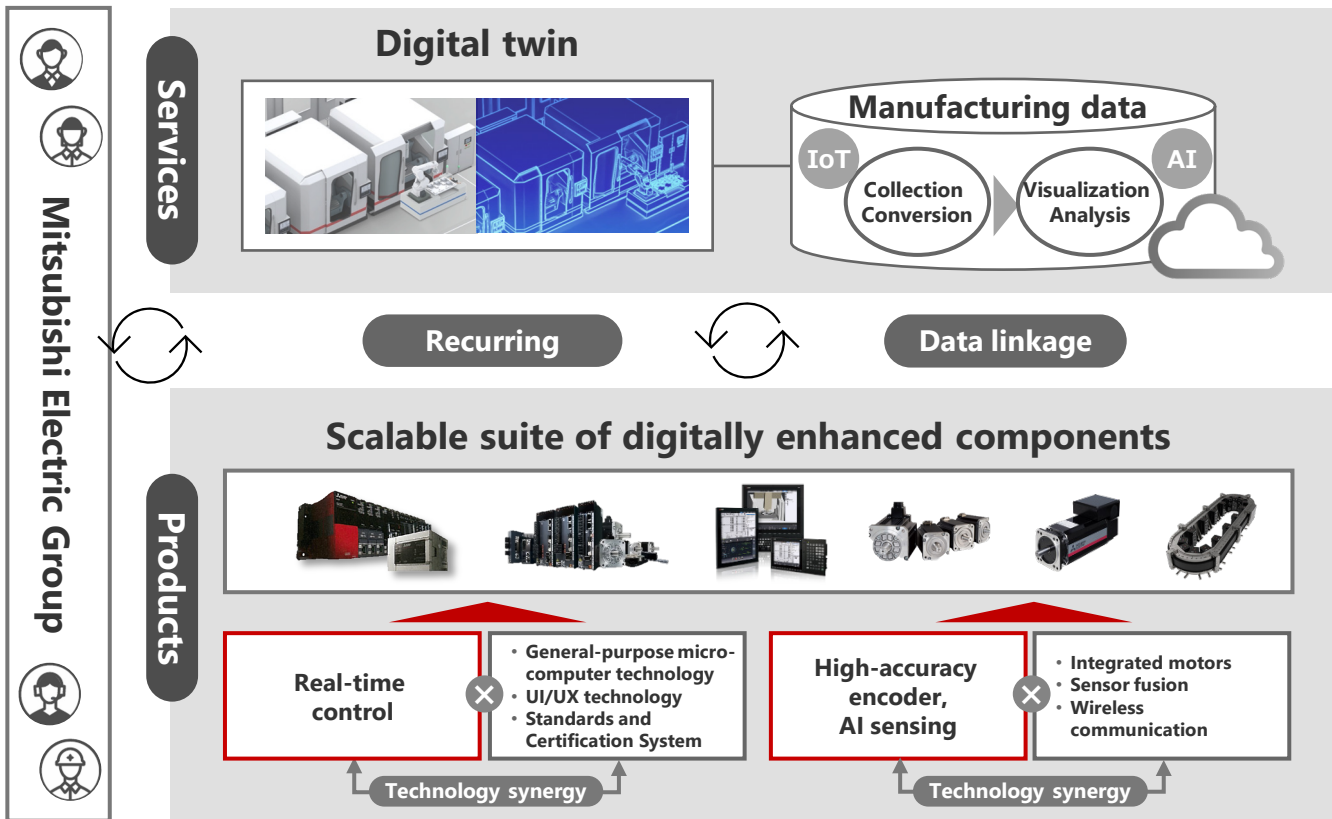
- Improve profitability through proactive measures such as resource reorganization and model consolidation
- Shift resources to growth areas from non-performing areas by withdrawal or sell, while searching for the best owners
  - Distribution transformer business: Business transfer (Apr. 2024)

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## Industry & Mobility BA

Maximize technological synergies, mutually reinforcing the manufacturing capabilities of the Automotive Equipment Business, the FA System Business, and the FA digital solution business.

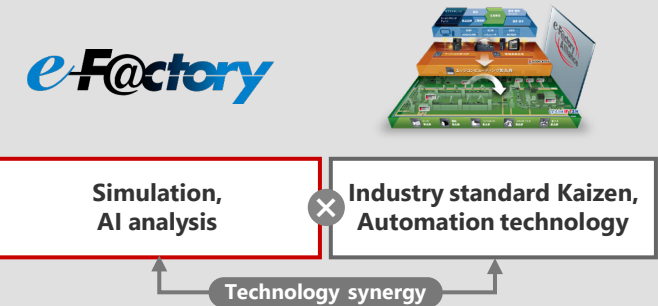
## Digital Solution



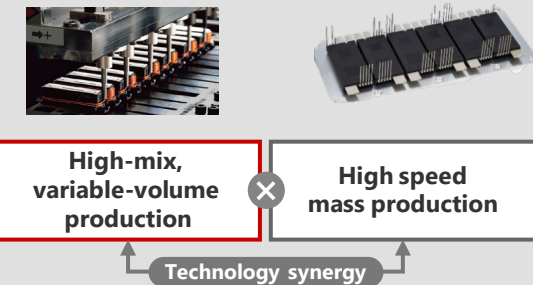
Data utilization knowhow

## Manufacturing Capabilities of the Automotive Equipment Business and FA Systems Business

### e-F@ctory improvement activities



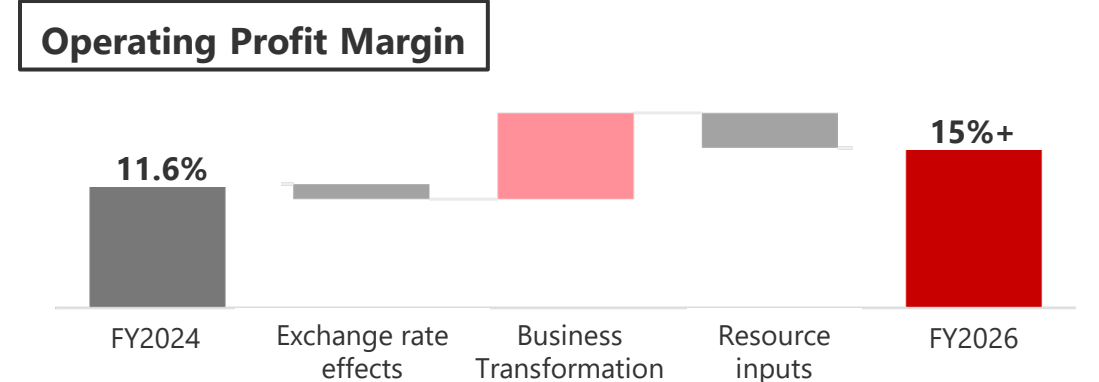
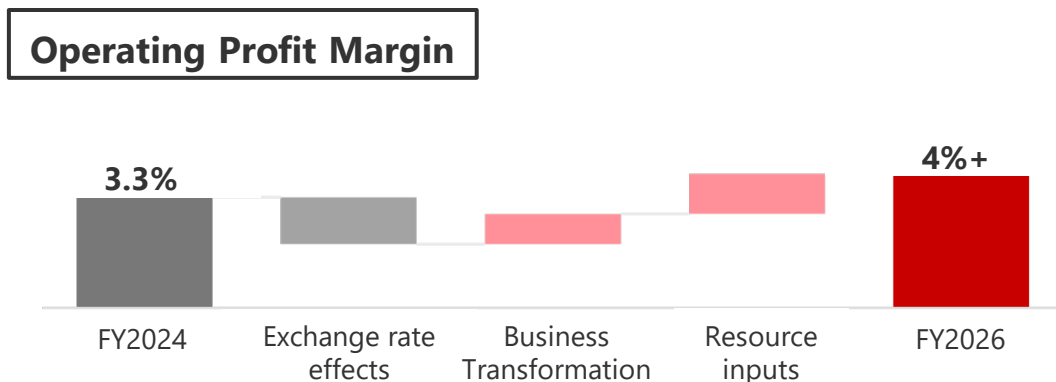
### Advanced motor/Inverter manufacturing technology



Cutting-edge FA technology

# FY2026 Financial Target: Breakdown of Changes in Revenue and Operating Profit 4. Industry & Mobility BA

Aim to achieve 9%+ operating profit margin by strengthening profitability through business transformation based on portfolio strategies such as; early termination of businesses facing extensive challenges and shifting resources to focused growth areas of CASE and FA Digital Solution businesses.

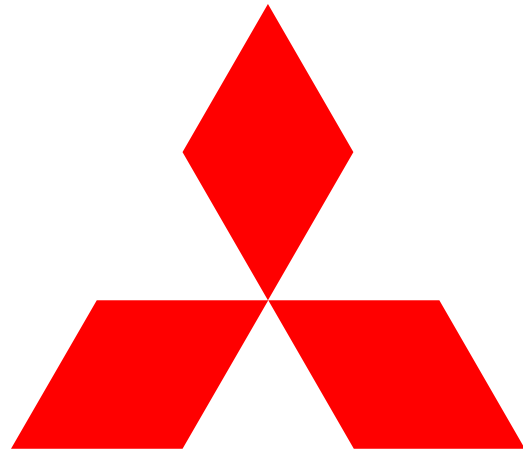


## Cautionary Statement

While the statements herein, including the forecasts regarding the Mitsubishi Electric Group, are based on assumptions considered to be reasonable under the circumstances on the date of announcement, actual results may differ significantly from forecasts. The main factors materially affecting the expectations expressed herein include but are not limited to the following:

1. Changes in worldwide economic and social conditions, as well as regulations, taxation and other legislation
2. Changes in foreign currency exchange rates
3. Changes in stock markets
4. Changes in the fund-raising environment
5. Changes in the supply and demand of products, as well as the material procurement environment
6. Establishment of important patents, status of significant licenses and disputes related to key patents
7. Litigation and other legal proceedings
8. Issues related to quality and defects in products or services
9. Laws, regulations and issues related to the global environment, especially responses to climate change
10. Laws, regulations and issues related to human rights
11. Radical technological innovation, as well as the development, manufacturing and time-to-market of products using new technology
12. Business restructuring
13. Information security incidents
14. Large-scale disasters, including earthquakes, tsunamis, typhoons, volcanic eruptions and fires
15. Social, economic and political upheaval due to heightened geopolitical risks, war, conflict, terrorism or other factors
16. Social, economic and political upheaval due to pandemics or other factors
17. Important matters related to Mitsubishi Electric Corporation's directors and executive officers, major shareholders, affiliated companies and other stakeholders

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In the event of any discrepancy between this document and the Japanese original, the original shall prevail.



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ELECTRIC**

*Changes for the Better*