

# **Mitsubishi Electric Key Growth Businesses**

## **Factory Automation (FA) Control Systems**

**[PLC, Servo, and CNC]**

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**November 8, 2021**

**Mitsubishi Electric Corporation**

**1**

**FA Systems Division formulates medium-term business plan aiming for sales of 800 billion yen or more and operating profit ratio of 17% or more in FY2025.**

**2**

**The FA Control Systems Business, a key growth business for the entire company, aims for sales of 400 billion yen or more and an operating profit ratio of 23% or more in FY2025, by focusing management resources.**

**3**

**Taking “Technological Innovation (digital decarbonization)” and “Intelligent Manufacturing” as opportunities for future growth and growth strategies.**

**4**

**Contributing to the solution of social issues, such as decarbonization and labor shortage, through use of automation technology and energy-saving equipment and solutions at production sites.**

## **1. Business Overview**

### **1-1. Business Structure**

### **1-2. Business Details and Areas**

### **1-3. FY 2021 2Q Result Highlights**

### **1-4. Our Strengths**

### **1-5. Business Management Policy**

## **2. Medium-term Management Plan of Key Growth Businesses**

### **2-1. Our Vision**

### **2-2. Business Environment**

### **2-3. Direction of Business Expansion**

### **2-4. Growth Strategy**

### **2-5. Initiatives to meet Social Challenges**

#### Note

FY 2018: April 1, 2018 -March 31, 2019

FY 2019: April 1, 2019 -March 31, 2020

FY 2020: April 1, 2020 -March 31, 2021

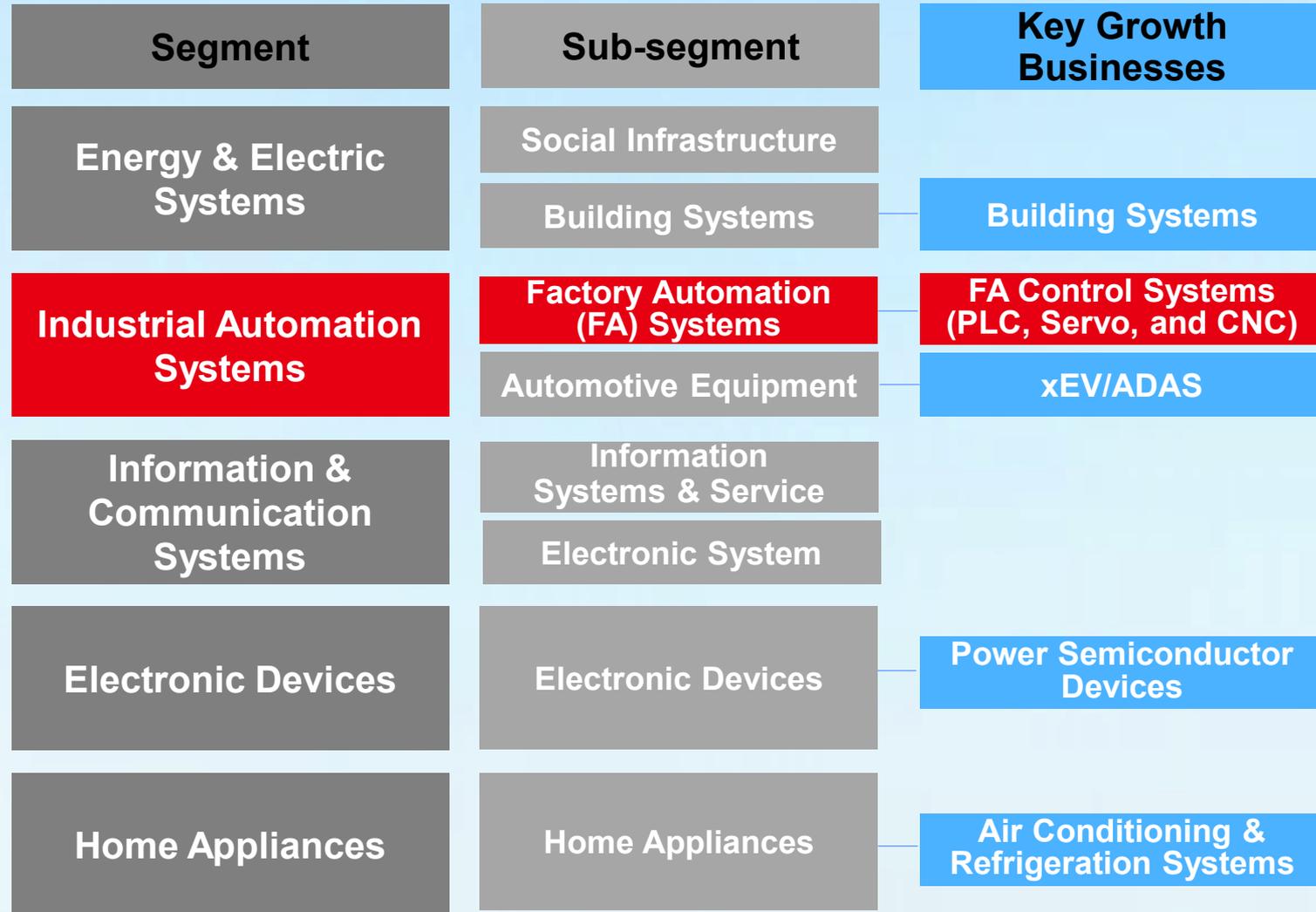
FY 2021: April 1, 2021 -March 31, 2022

FY 2025: April 1, 2025 -March 31, 2026

# 1

## Business Overview

### Business Structure



Providing a wide range of products, services, and solutions to support customers' manufacturing

Business Group		Product			
Control and Drive Products	FA Control Systems	 PLC	 Servo	 CNC (Numerical Controller)	
	Other Control and Drive Products	 HMI	 Inverter	 Robot	
Processing Machine		 Laser Processing Machine	 Electric Discharge Machine	 Laser Processing Machine for CFRP <sup>1</sup>	 Metal 3D Printer
Rotary Motor Power Distribution Control equipment		Rotary Motor 	Power Distribution Control Equipment 		
Integrated Solution		 Consulting	 Software	 Remote Services	

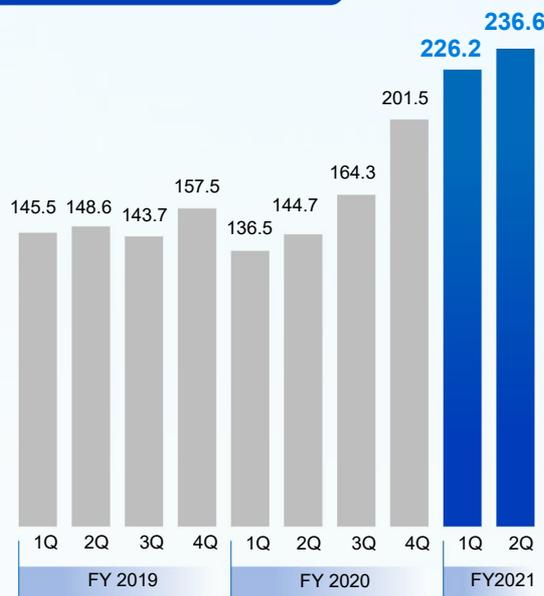
\*1: Laser processing machine for Carbon, Fiber, Reinforced and Plastics

Demand increased from FY 2020 3Q and further from FY 2021 1Q

(\u00a5bn)	FY 2020 2Q	FY 2021 2Q	Year-on-year change	
			change	%
Orders received	281.2	<b>462.8</b>	+181.6	165
Net sales	272.3	<b>366.7</b>	+94.4	135
Operating profit [Operating Profit Ratio]	25.5 [9.4%]	<b>63.0 [17.2%]</b>	+37.5 [+7.8pt]	247 -

Demand Growth Factors	
Type of business	<b>Digital: Electronics, Semiconductors, 5G, etc.</b> <b>Decarbonization: EV, Battery, Solar power, etc.</b>
Region	<b>All regions (especially East Asia)</b>
Model	<b>All products (especially PLC/Servo/CNC/Processing machine)</b>

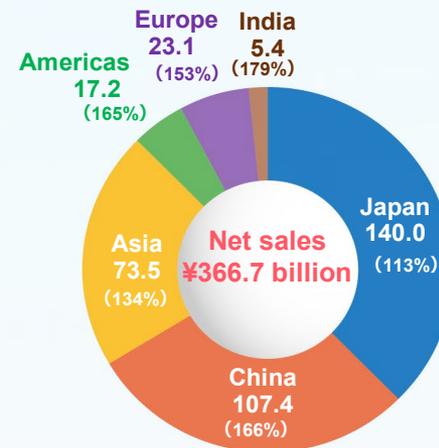
Orders Received (\u00a5bn)



Net Sales (\u00a5bn)

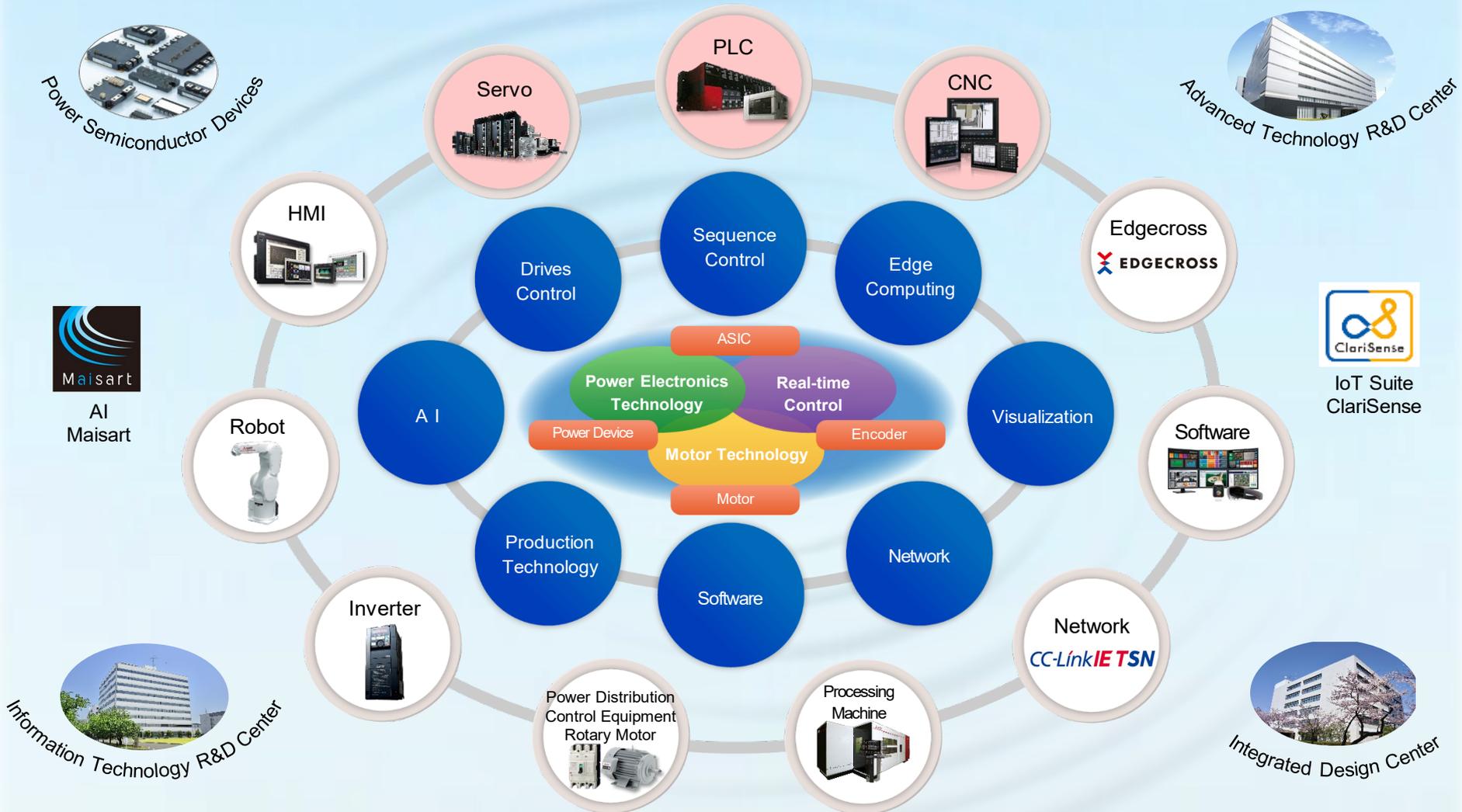


By Region (FY 2021 Cumulative 2Q)

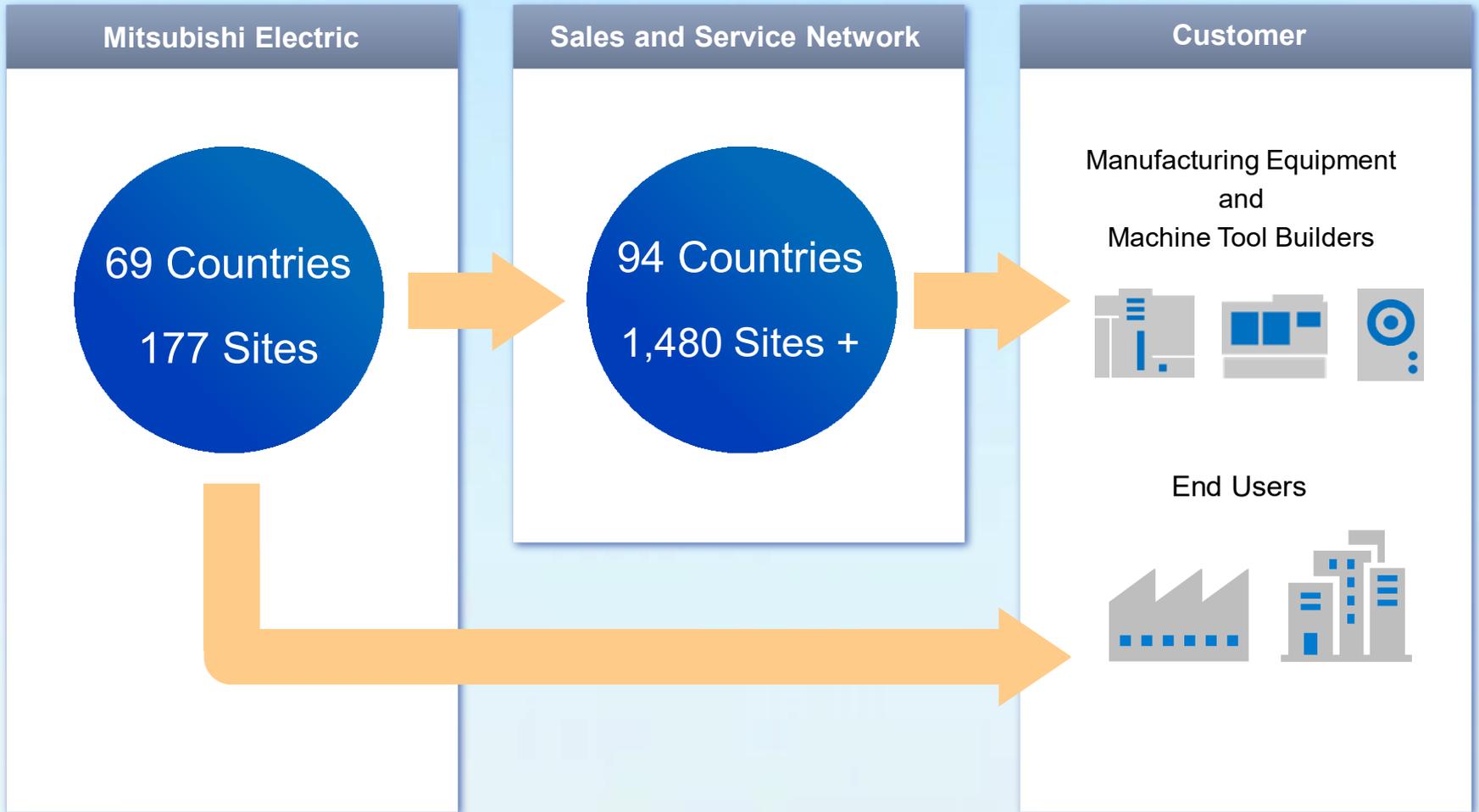


\*In parentheses: YoY percentage change

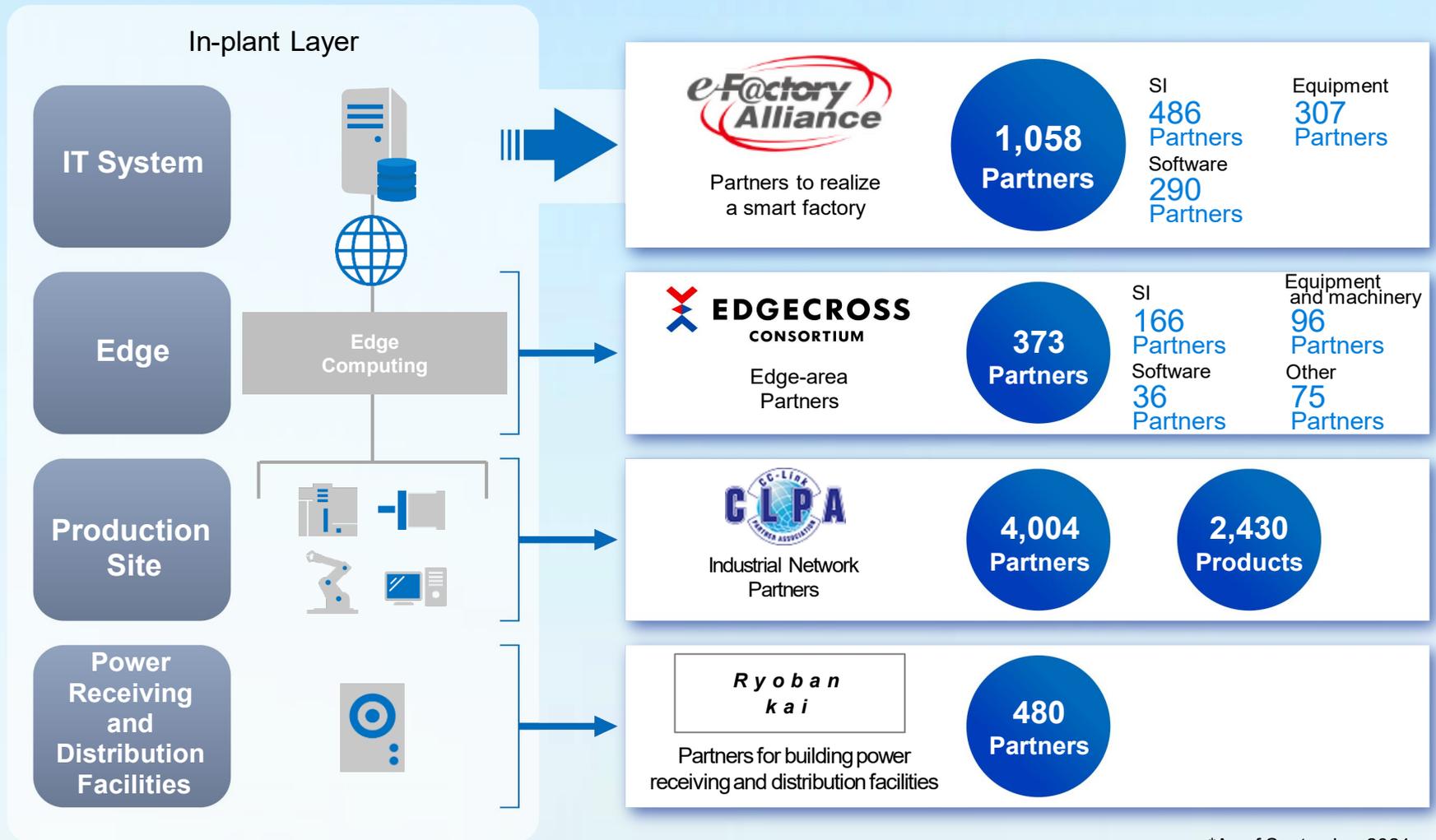
Core of our FA products : Control and drive technologies, synergy, and in-house key parts



## Sales and service network covering the global FA market

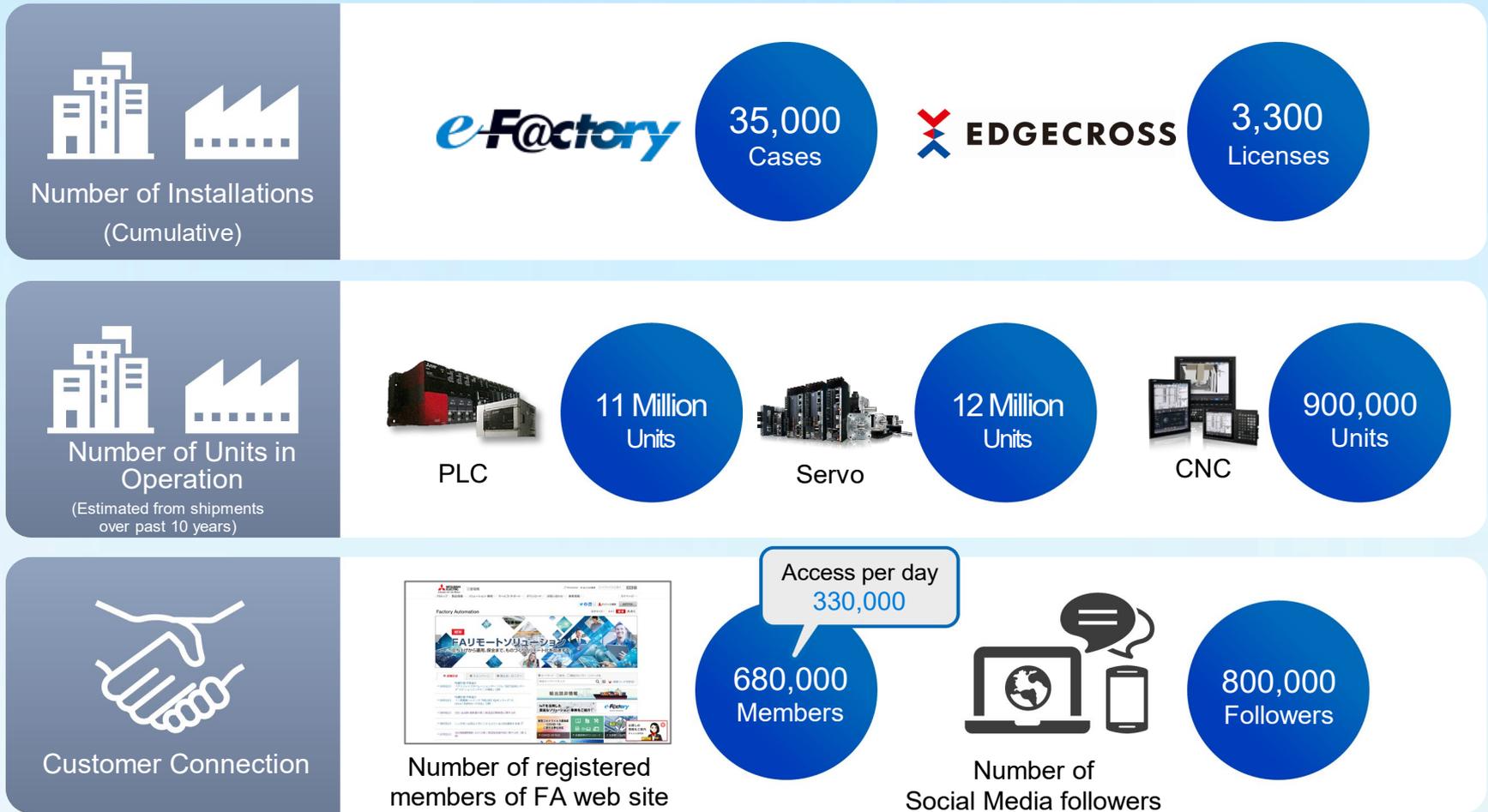


Ecosystem with partners to meet diverse customer needs



\*As of September 2021

Connection with customers gained through abundant delivery records and operating units

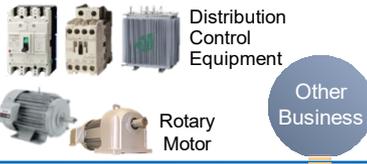


\*As of September 2021

### FY 2025 Growth Targets : FA System Business

		FY 2020 Actual	FY 2021 Forecast	FY 2025 Target
<b>Revenue</b>		<b>¥587.9 billion</b>	<b>¥750 billion</b>	<b>¥800 billion+</b>
<b>Operating Profit Margin</b>		<b>10.5%</b>	<b>16.8%</b>	<b>17.0%+</b>
Exchange Rate	US \$	106 yen	110 yen	105 yen
	Euro	124 yen	128 yen	115 yen
	Renminbi	15.7 yen	17.0 yen	15.0 yen

Our FA system business consists of a wide range of products.  
Clarify resource input policies for each business segment and accelerate growth.

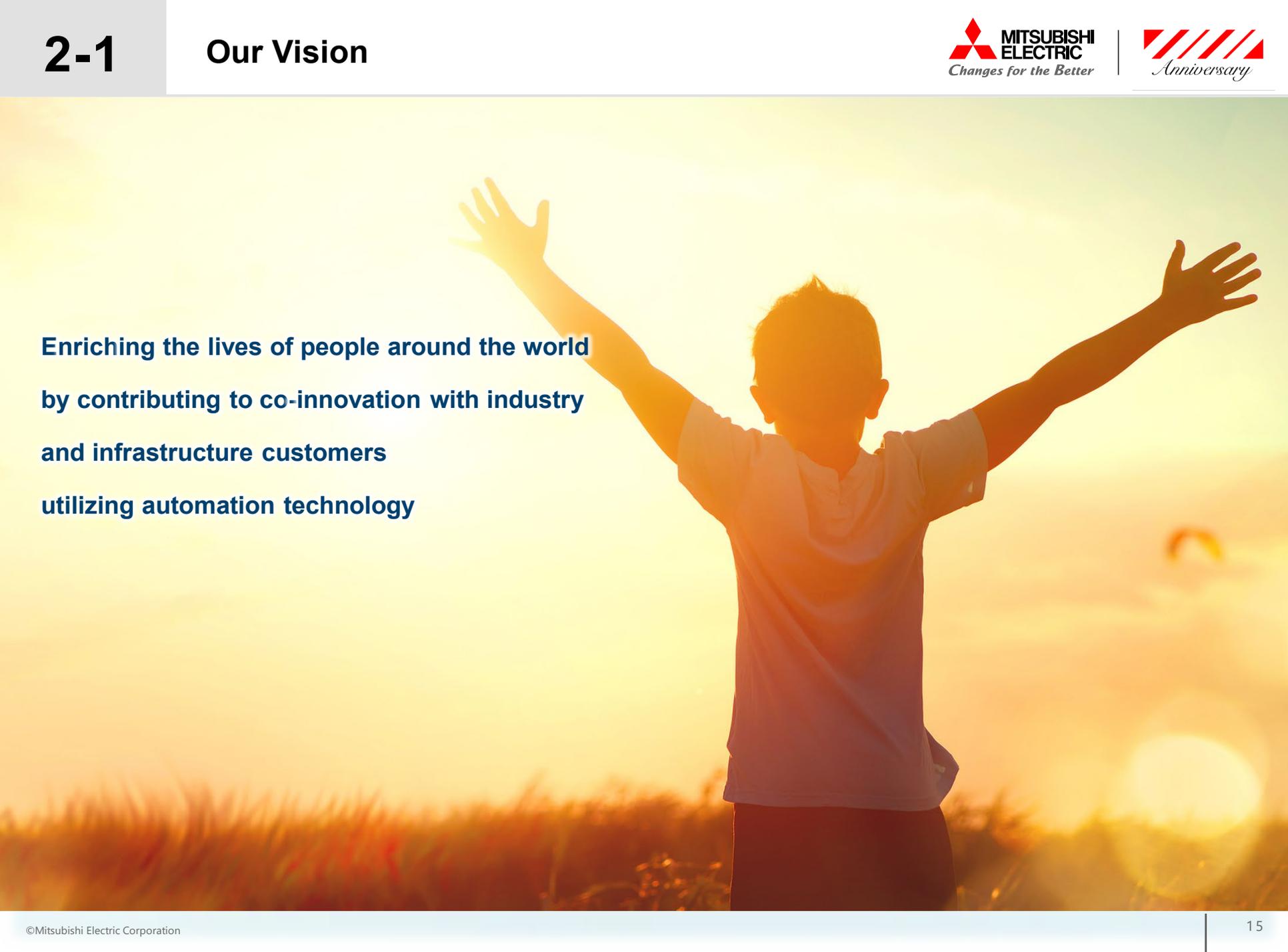
Business Category	Product	FY 2020		FY 2021		FY 2025		
		Net Sales (¥bn)	Operating Profit Margin	Net Sales (¥bn)	Operating Profit Margin	Business Resource	Net Sales (¥bn)	Operating Profit Margin
Key Growth Businesses		265	~20%	355	20%+		400	23%+
								
Stable Profit Businesses		149	10%+	197	15%+		210	15%+
								
Integrated Solution, Potential and New Businesses		56	~3%	65	5%+		93	10%+
								
Value Recapturing Businesses and Other Businesses		167	~5%	184.5	~5%		155	5%+
								
Consolidated Total		588	10.5%	750	16.8%		800	17.0%

April 2022 (planned): Establishment of a new industrial sewing machine company (20% owned by Mitsubishi Electric)

# 2

## Medium-term Management Plan of Key Growth Businesses

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A person is seen from behind, standing in a field of tall grass. Their arms are raised high in the air, reaching towards a bright, glowing sunset sky. The sun is low on the horizon, creating a warm, golden light that fills the scene. The person is wearing a light-colored t-shirt and dark shorts.

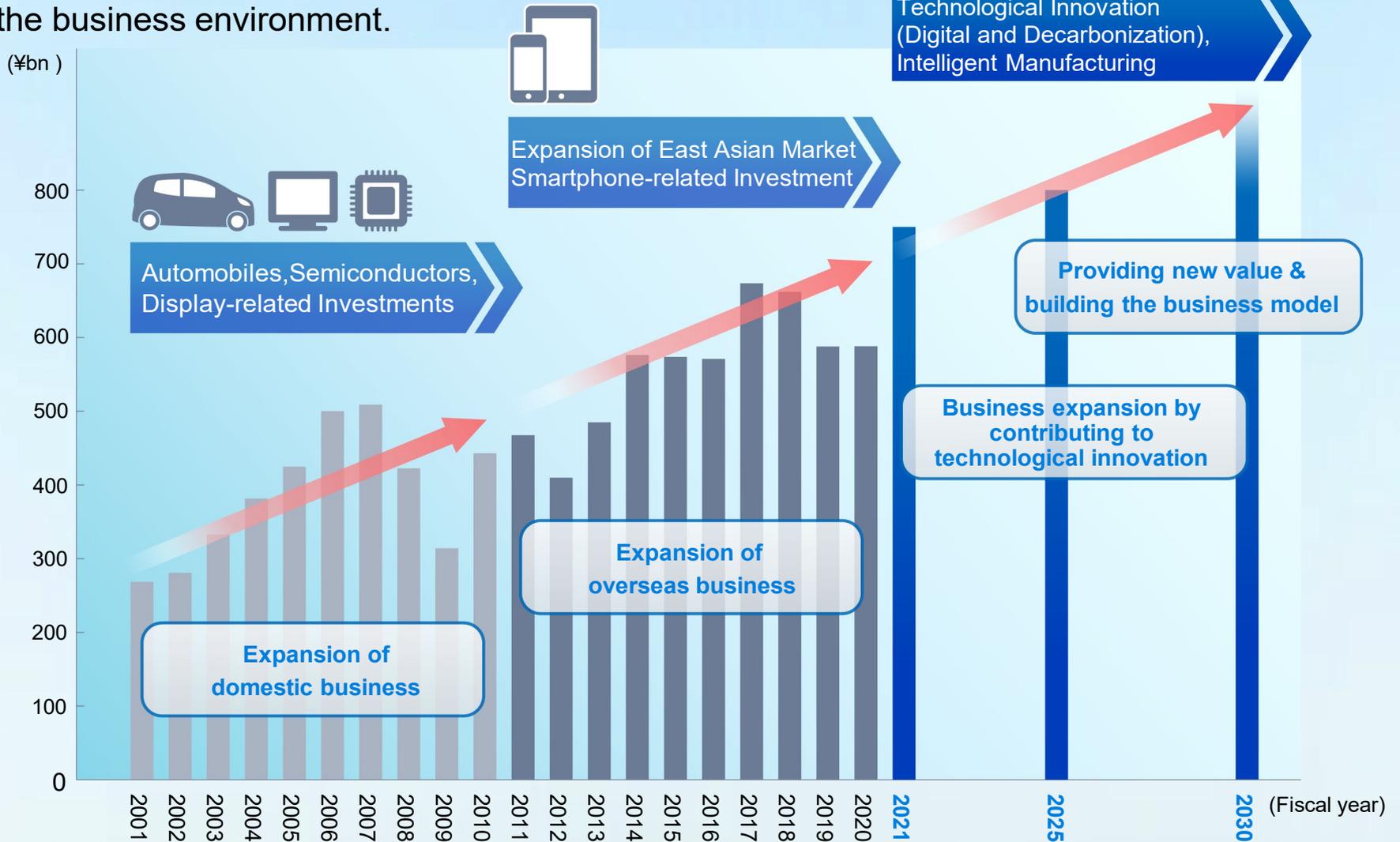
**Enriching the lives of people around the world  
by contributing to co-innovation with industry  
and infrastructure customers  
utilizing automation technology**



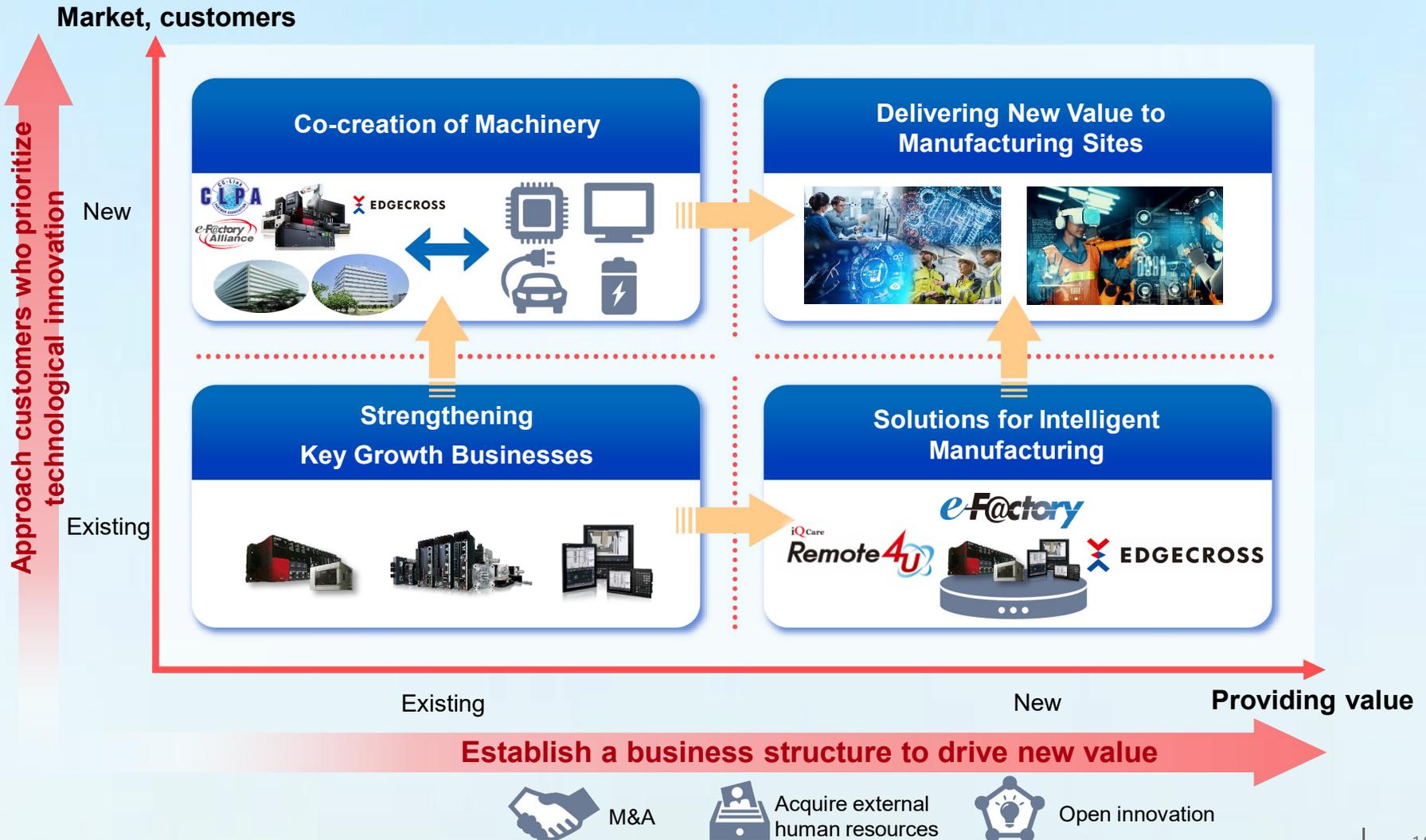
**Our role will become increasingly important  
for technological innovation and the realization  
of a sustainable society**



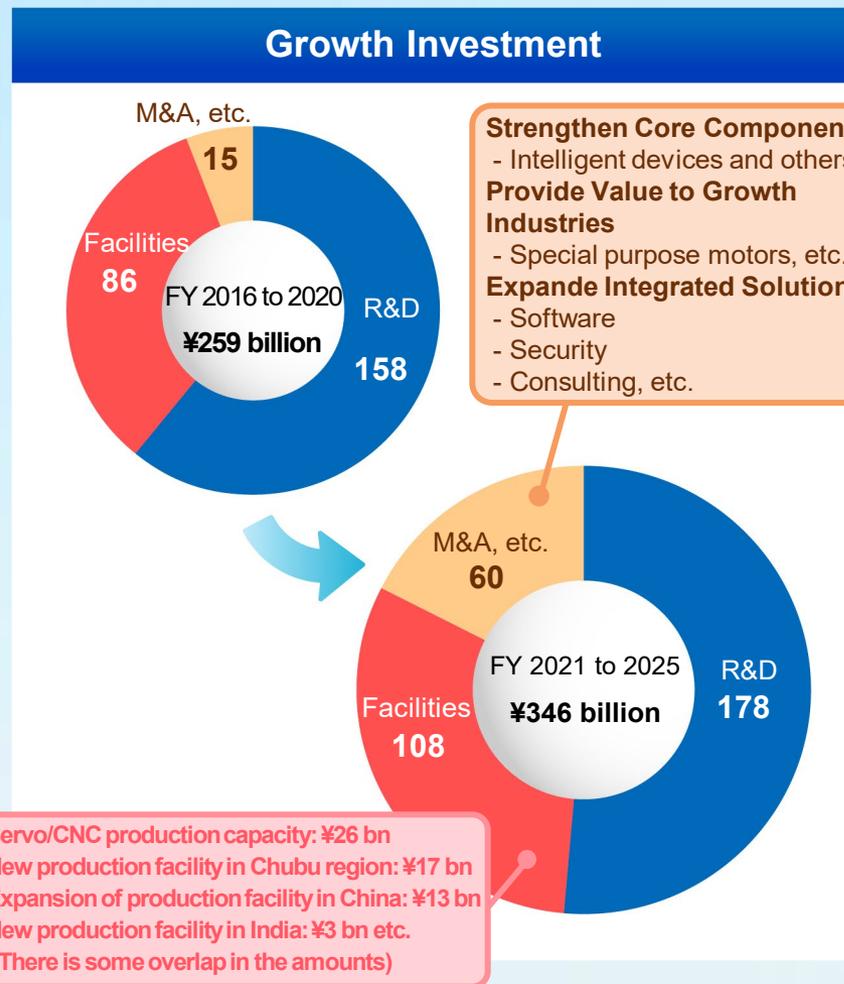
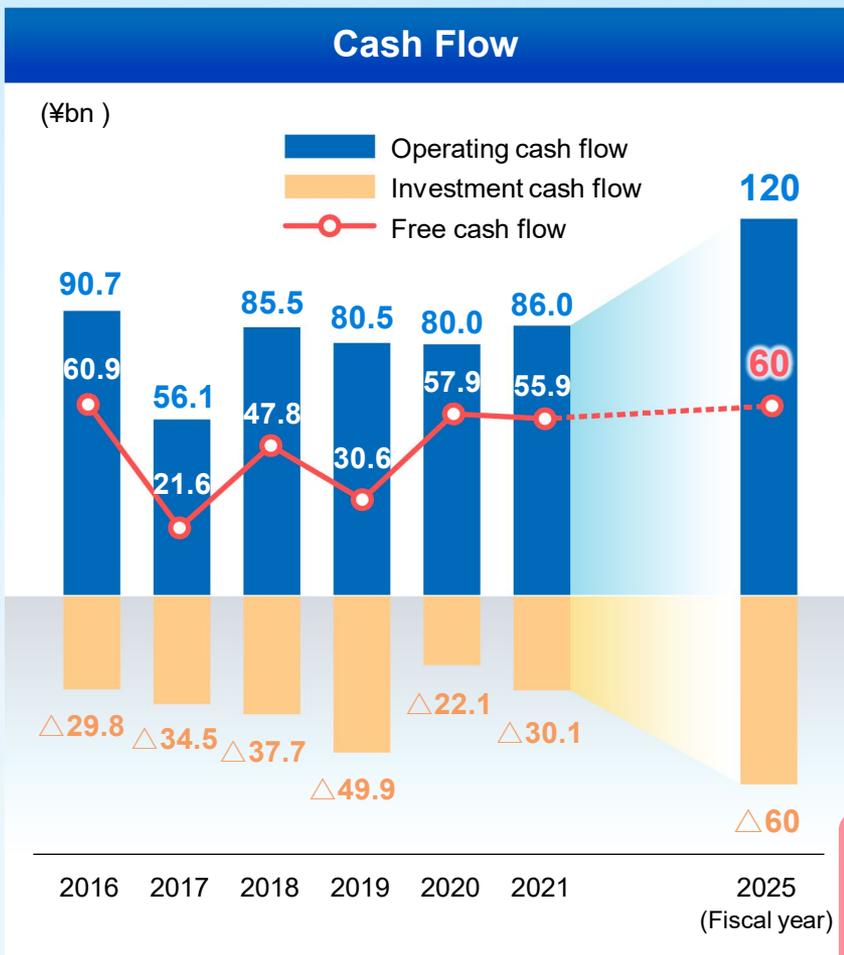
Our FA business has expanded steadily by providing value to growth areas. We formulate strategies for growth based on the business environment.



Focusing on “Technological innovation (digital and decarbonization)” and “Intelligent manufacturing” for future business expansion, we will acquire appropriate technology / human resources and establish a "business driving" structure.



Our FA business continuously generates stable free cash flow.  
We will strengthen growth investments to realize further expansion of operating cash flow.





Key Growth Businesses

	FY 2020 Actual	FY 2021 Forecast	FY 2025 Target
Net Sales	¥265 billion	¥355 billion	¥400 billion
Operating Profit Margin	~20%	20%+	23%+

Integrated Solutions, Potential & New Businesses

	FY 2020 Actual	FY 2021 Forecast	FY 2025 Target
Net Sales	¥56 billion	¥65 billion	¥93 billion
Operating Profit Margin	~3%	5%+	10%+

Introducing next-generation products that meet cutting-edge customers' needs



PLC

Optimal control of manufacturing equipment and production lines



Servo

High speed and high accuracy control of manufacturing equipment



CNC

High speed and high accuracy control of machine tools

Product Roles

Growth Strategy

Contribute to technological innovation through co-creation and development with advanced manufacturing equipment manufacturers,  
Strengthen global business structure (manufacturing, development, sales, service, IT)

Core Components

Development of next-generation products with maximum performance and scalability

Next-generation PLC Under development

Strengthen high-speed and high-accuracy technologies

INTEGRATED ELECTRIC SERVO SYSTEM  
**MELSERVO-J5**  
Released May 2019

**M800V/M80V Series**  
COMPUTERIZED NUMERICAL CONTROLLERS  
Released in July 2021

Field Knowledge

Application development for growth industries

Advanced Digital Technology

Integration with digital technologies such as 5G, AI, and Cloud technologies

5G

Verification test using PLC production line



Started in November 2021

AI



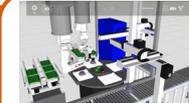
Applied to 21 products

Cloud

iQCare  
**Remote4U**

Started in April 2016

Digital Twin



Released in August 2021

Cybersecurity

IEC62443-4-1

Acquired in May 2021

Establishing business structure to support customers' innovation globally



Strengthening sales organization for growth industries

**Global 260 +**  
(As of September 2021)



April 2021: Dedicated organization established

Optimal proposal by industry

Customer support for overseas expansion

Expansion of innovation labs for the global market

**More than 200 engineers**  
(Planned for FY2025)



Regions:

China, Europe, North America, India

Creation of innovation unique to Mitsubishi Electric

**Corporate Research and Development Group**



Advanced Technology R&D Center



Information Technology R&D Center



Integrated Design Center

**Co-creating to meet the customer's ideal status**

Providing integrated solutions that leverage our strengths to meet the needs of intelligent manufacturing

FA Systems Business							
IT	ERP	PLM	SCM	MES	e-Factory Alliance	Partner Products	
Edge	Industrial PC  Released May 2018	SCADA  Acquired Aug 2019	Digital Twin  Released Aug 2021	Data Analysis  Released May 2018	Energy Saving Analysis and Diagnosis  Released Oct 2020	 Partner Products Established Nov 2017	
	PLC  <b>Key Growth</b>	Motion  <b>Key Growth</b>	CNC  <b>Key Growth</b>	HMI 	Software 	Network  Partner Products Released May 19	
OT (FA)	Inverter 	Servo 	Servo System 	Robot 	Motors 	 Partner Products	
	Sensor 	Power Distribution & Control Devices 	Processing Machine 	 Partner Products Released May 2019			
Technological Assets	Real-time Control Technology	Power Electronics Technology	Motor Technology	Manufacturing Technology	Maisart (AI)	ClariSense	Communication Technology (5G utilization)
Customer Assets	No. of Deliveries	e-F@ctry 35,000	No. of Units in Operation	PLC: 11 Million Units Servo: 12 Million Units CNC: 0,9 Million Units	Customer Contact	Registered Members on FA Web Site: 680,000 Members	
Partner Assets	e-F@ctory Partners: 1,058 companies, Edgexross Partners: 373 companies, CC-Link Partners: 4,004 companies						

## Characteristics of Mitsubishi Electric

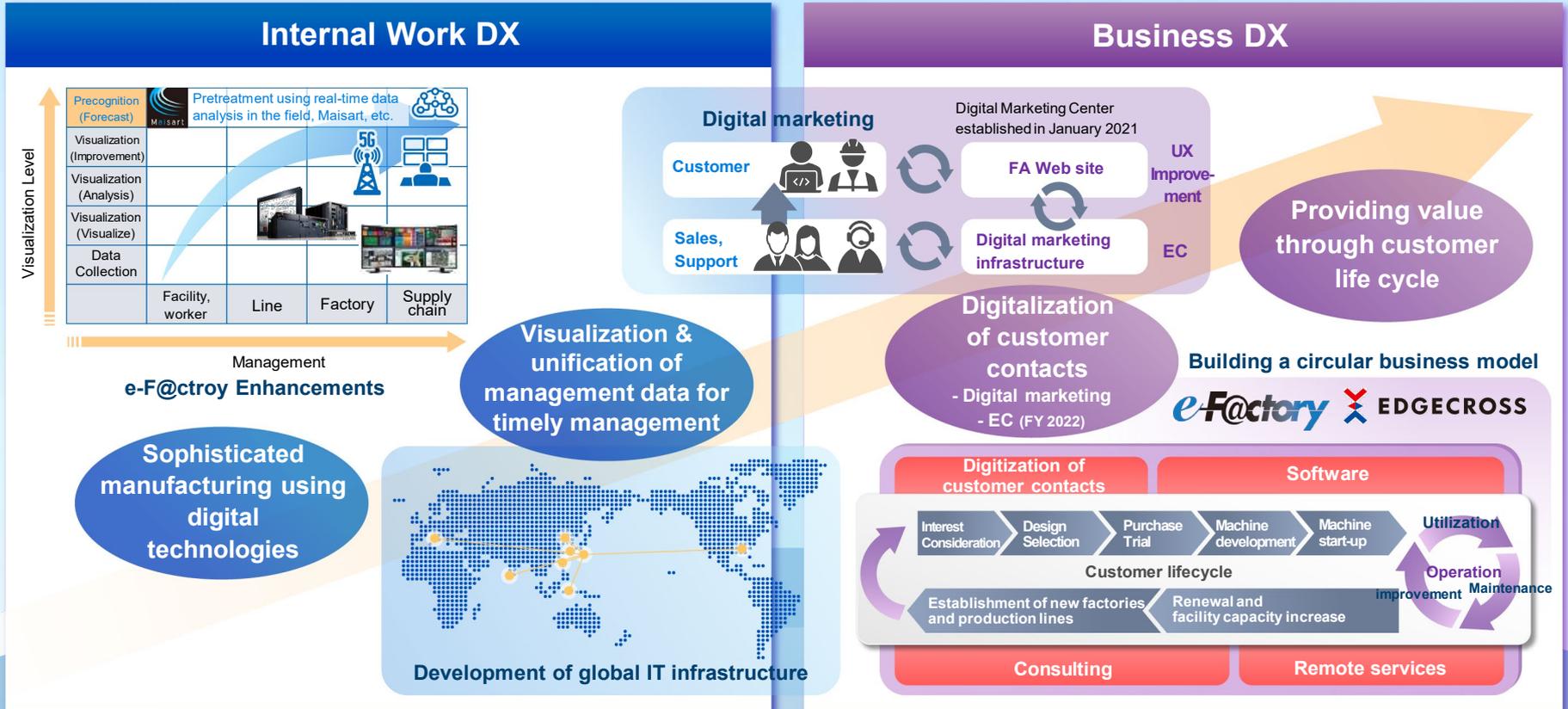
 Offering a diversified product lineup, technology, knowledge and comprehensive value as a general electronics manufacturer

 Edge products and IoT platform to connect IT and OT

 Capable of dealing with variety of customer needs through ecosystem with our partners

 Integration of digital technology to production sites; e-F@ctory (since 2003)

Accelerate the use of digital technology within the company, establish foundation for DX, and build a new business model



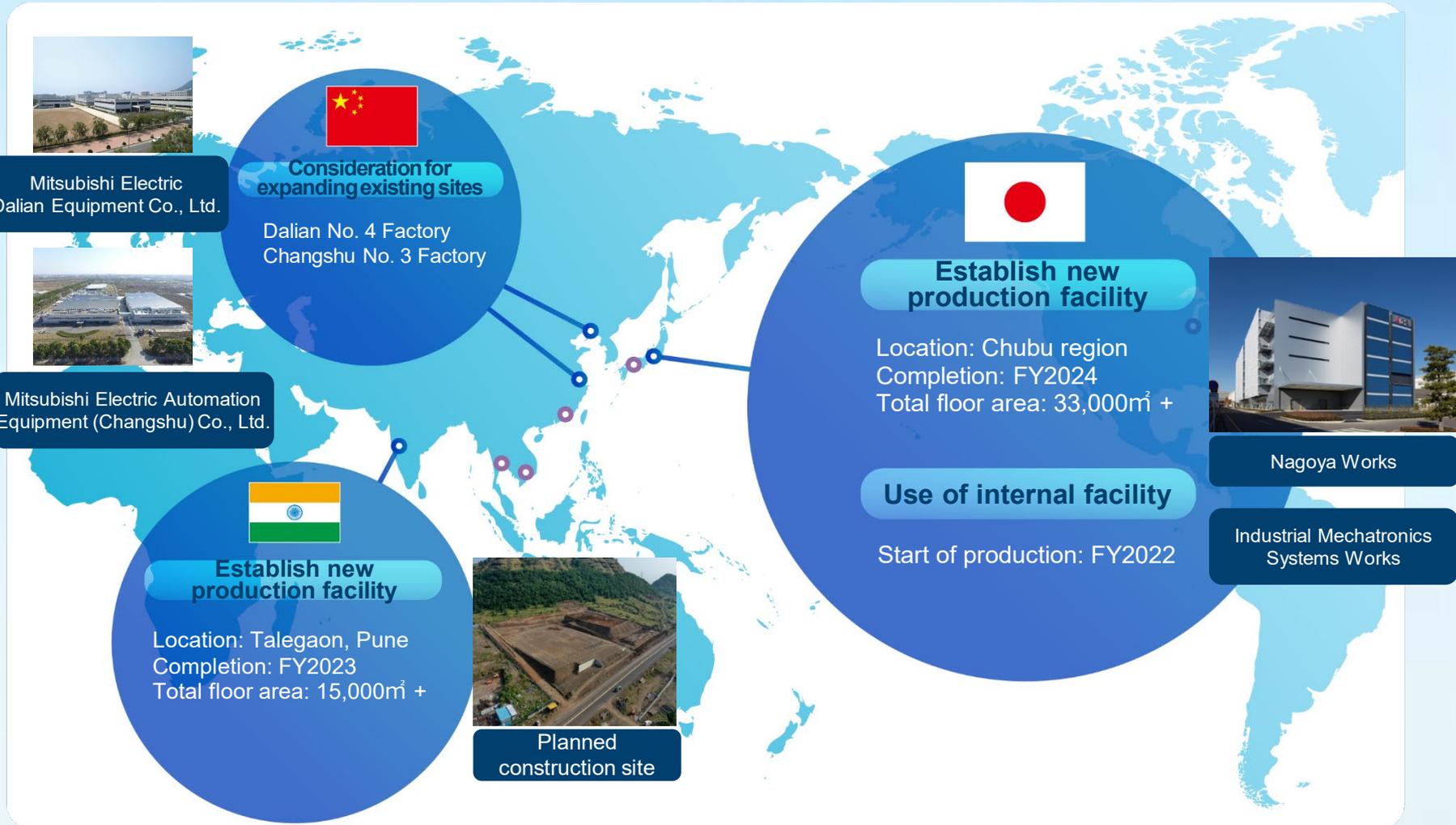
- Standardization and Rectification of Work Process
- Company-wide Initiatives
- DX Human Resources and Structure
- Employee Engagement
- Top Leadership
- Mindset and Human Resources System

### Foundation for DX Promotion

Creating value throughout the customers' life cycle using digital technology and field knowledge



Build a solid, stable supply system by increasing production capacity and establishing a global trilateral manufacturing structure



Materially realize sustainability

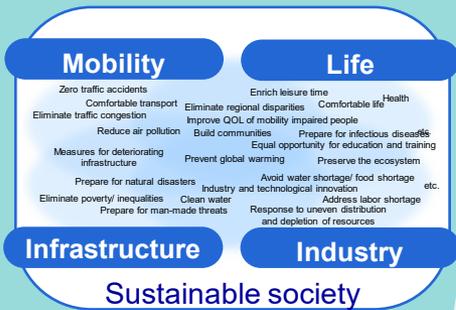
Provide solutions to social challenges through our business efforts

Realize a sustainable global environment

Realize a safe, secure, and comfortable society

Provide solutions to social challenges through our business	Realize a sustainable global environment
	Realize a safe, secure, and comfortable society
Strengthen our business foundation to enable our sustainable growth	Respect for all people
	Strengthen corporate governance and compliance on a sustainable basis
	Create a sustainability-oriented corporate culture

Social Challenges



1 Contribute to a decarbonized society by providing Energy-saving equipment and solutions for production sites

Example (1) Fiber laser processing machine

Reduction of electricity consumption to 1/3 (compared to conventional CO2 laser processing machines)

Example (2) Energy-saving support application "EcoAdviser"

Support for energy conservation measures through automated diagnosis of energy loss factors with Maisart (AI technology)

2 Contribute to solving social issues through automation technology

Examples Overcoming issues caused by labor shortages

Robot utilized for automatic tire replacement system (RoboTire, Inc.)  
Tire replacement on one vehicle in 15 minutes



SDGs Contributing to Achievement



## Cautionary Statement

While the statements herein including the forecast of the Mitsubishi Electric Group are based on assumptions the Group considers to be reasonable under the circumstances on the date of announcement, actual results may differ significantly from forecasts.

Such factors materially affecting the expectations expressed herein shall include but are not limited to the following:

1. Any change in worldwide economic and social conditions, as well as laws, regulations, taxation and other legislation
2. Changes in foreign currency exchange rates, especially JPY/dollar rates
3. Changes in stock markets, especially in Japan
4. Changes in balance of supply and demand of products that may affect prices and volume, as well as material procurement conditions
5. Changes in the ability to fund raising, especially in Japan
6. Uncertainties relating to patents, licenses and other intellectual property, including disputes involving patent infringement
7. New environmental regulations or the arising of environmental issues
8. Defects in products or services
9. Litigation and legal proceedings brought and contemplated against the Company or its subsidiaries and affiliates that may adversely affect operations or finances
10. Technological change, the development of products using new technology, manufacturing and time-to-market
11. Business restructuring
12. Incidents related to information security
13. Large-scale disasters including earthquakes, typhoons, tsunami, fires and others
14. Social or political upheaval caused by terrorism, war, pandemics, or other factors
15. Important matters related to the directors and executive officers, major shareholders and affiliated companies of Mitsubishi Electric Corporation

