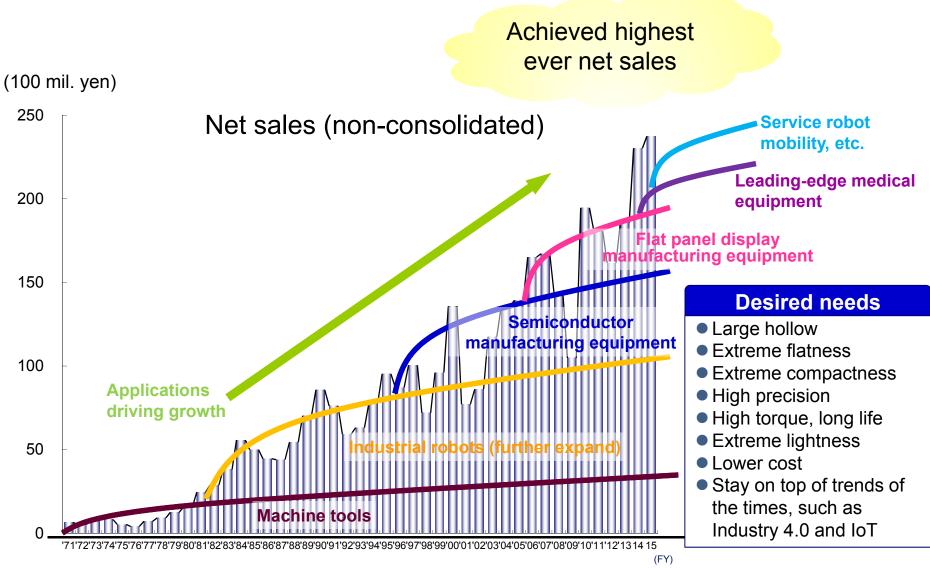


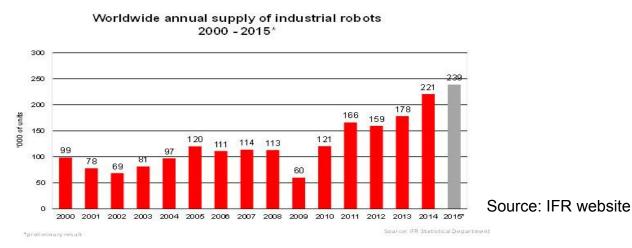
## Driving forth of our growth



## Global shipments of industrial robots

Industrial robot shipments in 2015: 239,000 (+8% YoY)

#### New record sales in 2015



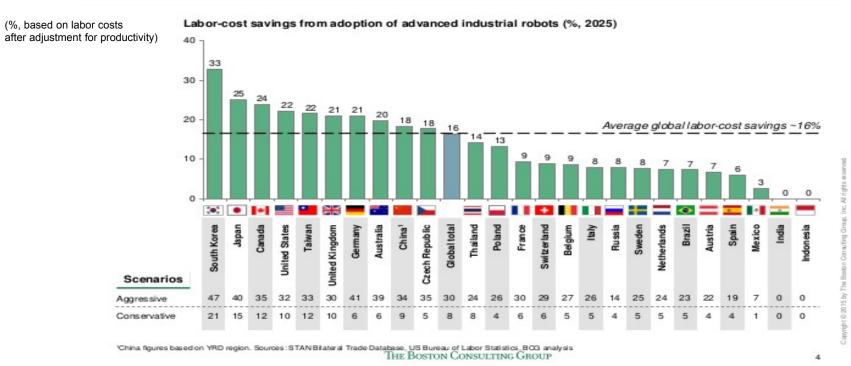
Main regions	Units sold in 2015	YoY change (%)
China	66,000	16
Asia (other than China)	78,000	-5
Europe	50,000	9
North America (US, Canada, Mexico)	34,000	11

Source: IFR website

#### Potential markets

- •Rate of labor cost reduction due to rapid expansion of industrial robot use
- •The more economically developed a country, the higher its labor costs, raising expectations for robot introduction.
  - Rate of labor cost reduction due to rapid expansion of industrial robot use (2014 and 2025 compared)

By 2025, ~25% of all tasks will be automated through robotics, driving ~16% in global labor-cost savings



Note 1: China figures based on Yangtze River Delta region.

Sources: STAN Bilateral Trade Database, US Bureau of Labor Statistics, BCG analysis

#### Robot classifications

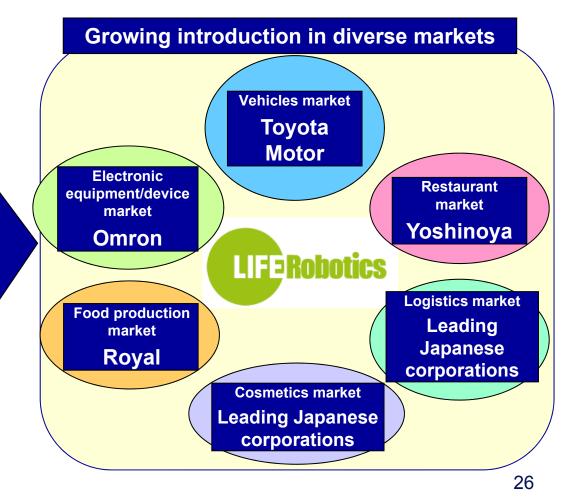
Туре		Use	Requirements for speed reducers
I. Industrial robot	Industrial robot	Making things on the factory floor, separated from humans by safety fence	High precision, high reliability, with sensing functions
	Co-bot	Operating alongside human workers, assisting and collaborating	Medium-precision, safety, acceleration efficiency, impact cushioning
II. Service robot	Professional robot	Medical, nursing care, rehabilitation, logistics, resource extraction, agriculture	Compact, light weight, flat, high precision
	Consumer robot	Consumer electronics, hobbies, toys	Low cost

Source: IFR and KDDI Research Institute with our additions

## LifeRobotics

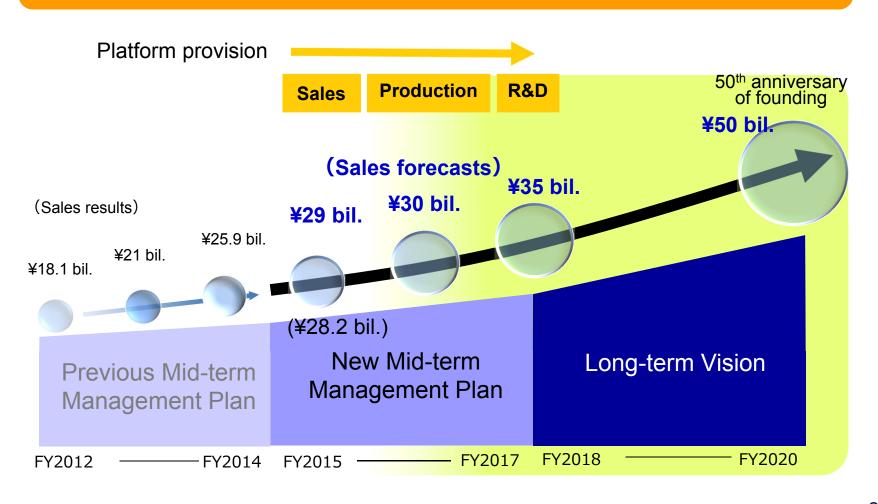
Japanese co-bot maker Picking co-bot with the "world's simplest operation"





## Realizing the long-term vision

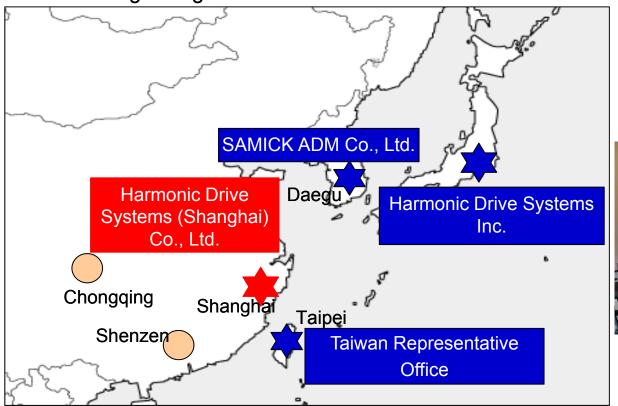
### Provision of platforms for sales, R&D, production



## Sales: Expanding sales to Asian markets

#### Planning to establish sales agency in Taiwan

- Electronic parts, semiconductors, EMS and other industries are flourishing Markets for robots, semiconductor manufacturing equipment, machine tools and other factory automation products are also expanding
  - New robot companies, and makers of built-in EMS robots and collaborative robots, are growing





Taiwan Representative Office

## Production capability: Expanding capacity

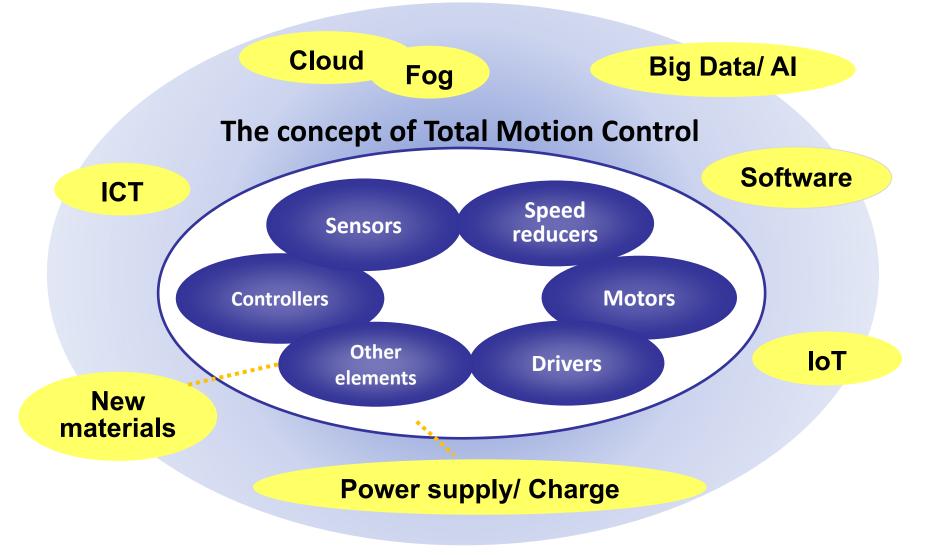
#### Completion of new plant building

- Meet medium-term demand increases
- Raise monthly production capacity from 50,000 to 80,000 units (Investment in machine tools and other equipment will be carried out in phases with an eye on demand trends.)
- Introduce new production engineering to boost efficiency and quality





# Research and Development: Total Motion Control and Relation to New Core Technologies



# Research and Development: Searching for new technologies and preparing for expansion of applications

#### New research site planned for Silicon Valley

- Search for new technologies, develop applications, gather information, and build relations with partners
- Take advantage of U.S. subsidiary to station our staff

