

# HAI ROBOTICS

## Disruptive Technologies for the Intralogistics Industry

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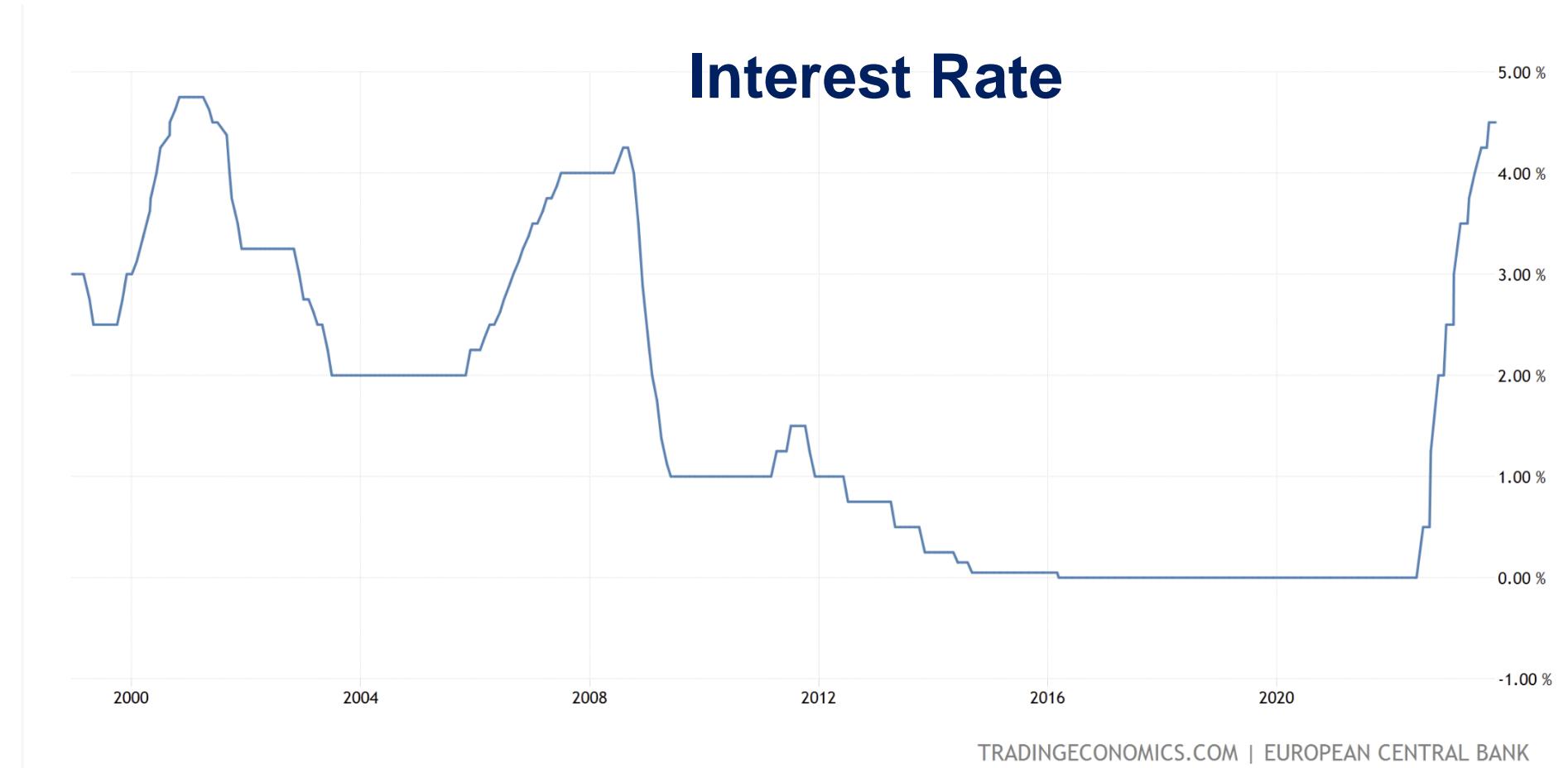
## Part 1

### Market observations

Observaciones del Mercado

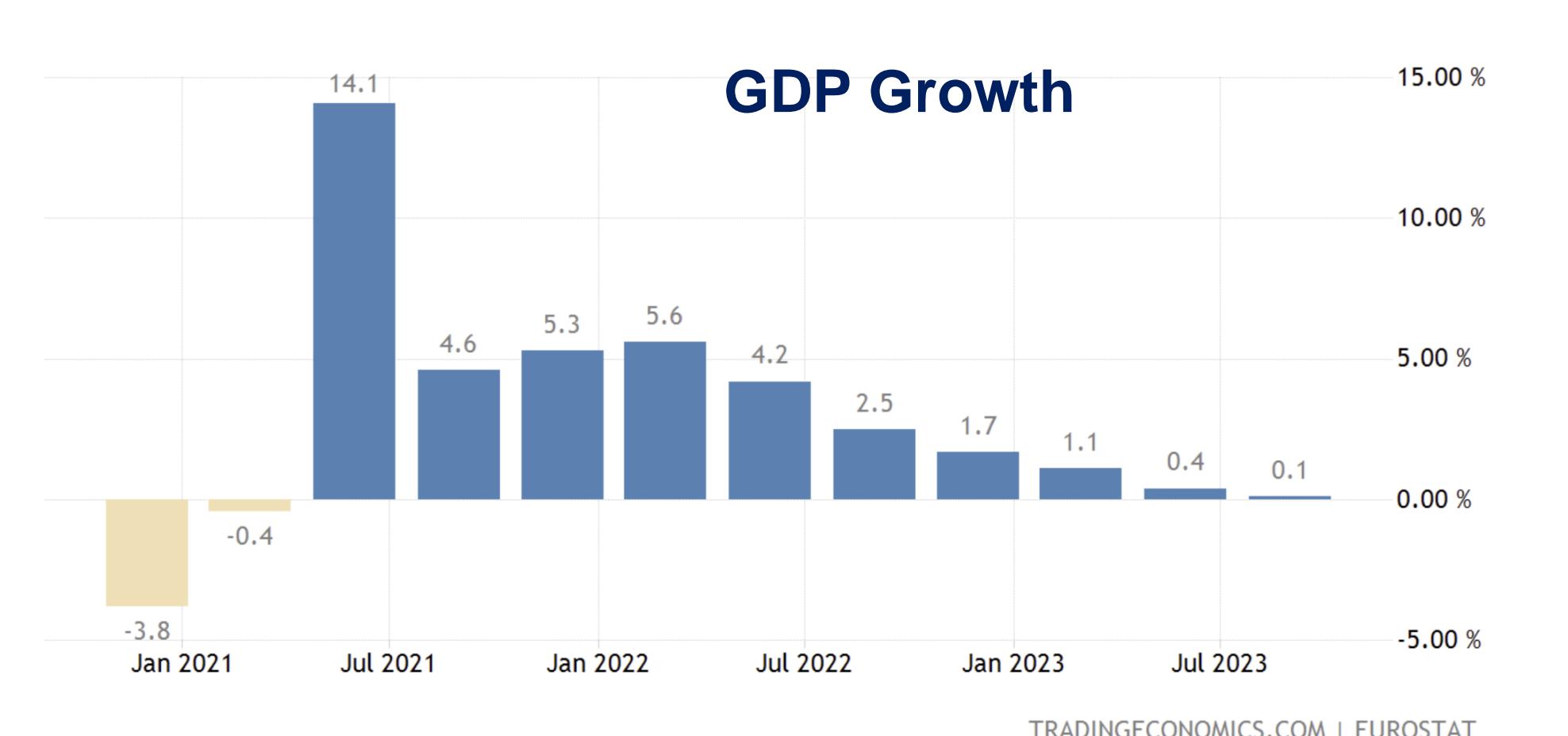
# Market changes

## Economic Factor



The main refinancing operations rate to a 22-year high of 4.5% and the deposit facility rate to an all-time record of 4%.

*La tasa de operaciones principales de refinanciación alcanzó un máximo de 22 años del 4.5% y la tasa de la facilidad de depósito alcanzó un récord histórico del 4%*



The Gross Domestic Product (GDP) in European Union expanded 0.10 percent in the third quarter of 2023 over the same quarter of the previous year.

*El Producto Interior Bruto (PIB) de la Unión Europea aumentó un 0.10 por ciento en el tercer trimestre de 2023 en comparación con el mismo trimestre del año anterior*

# Market changes

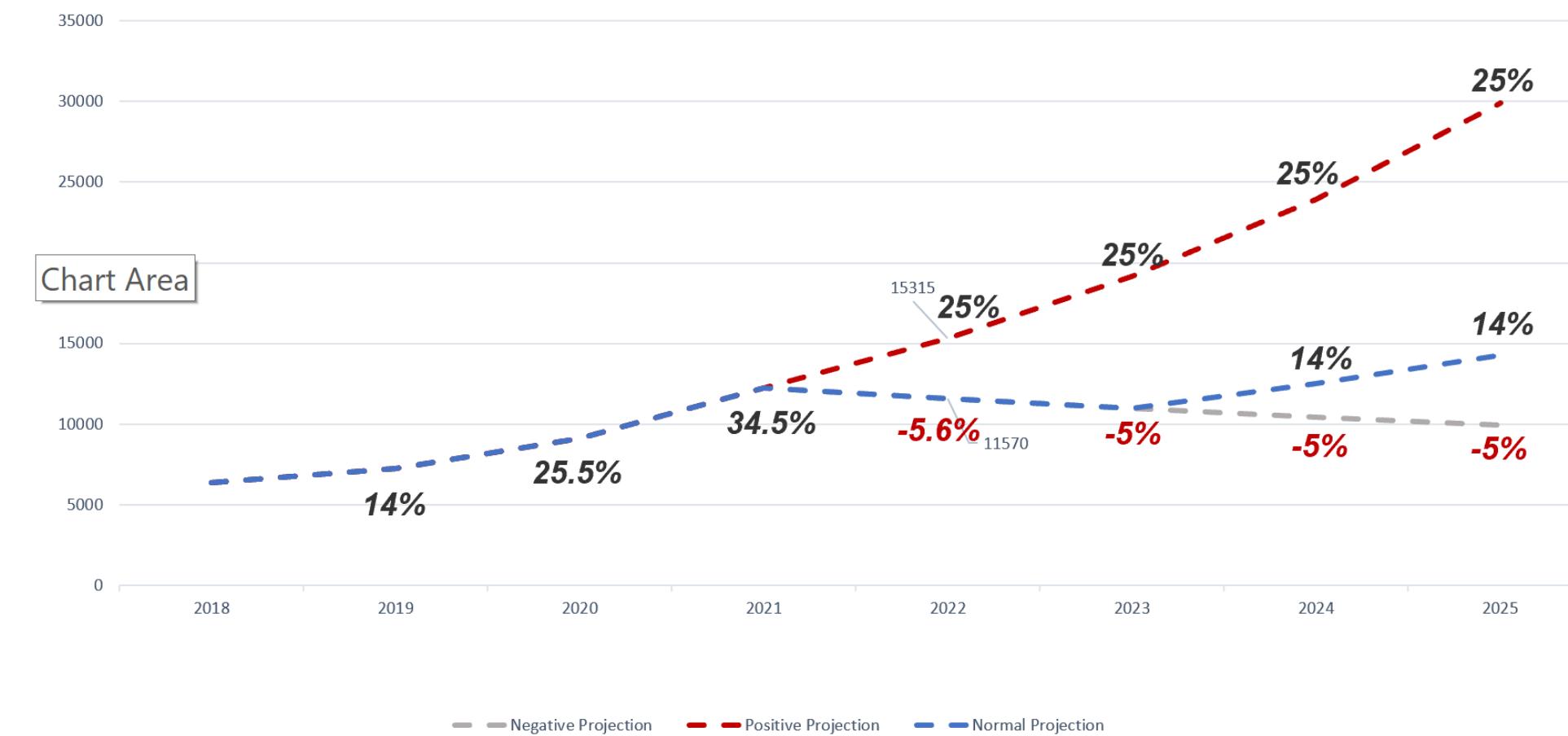
## Economic Factor



Retail Sales in European Union decreased 2.70 percent in September of 2023 over the same month in the previous year.

*Las ventas al por menor en la Unión Europea disminuyeron un 2.70 por ciento en septiembre de 2023 en comparación con el mismo mes del año anterior.*

## Retail Sales Projection



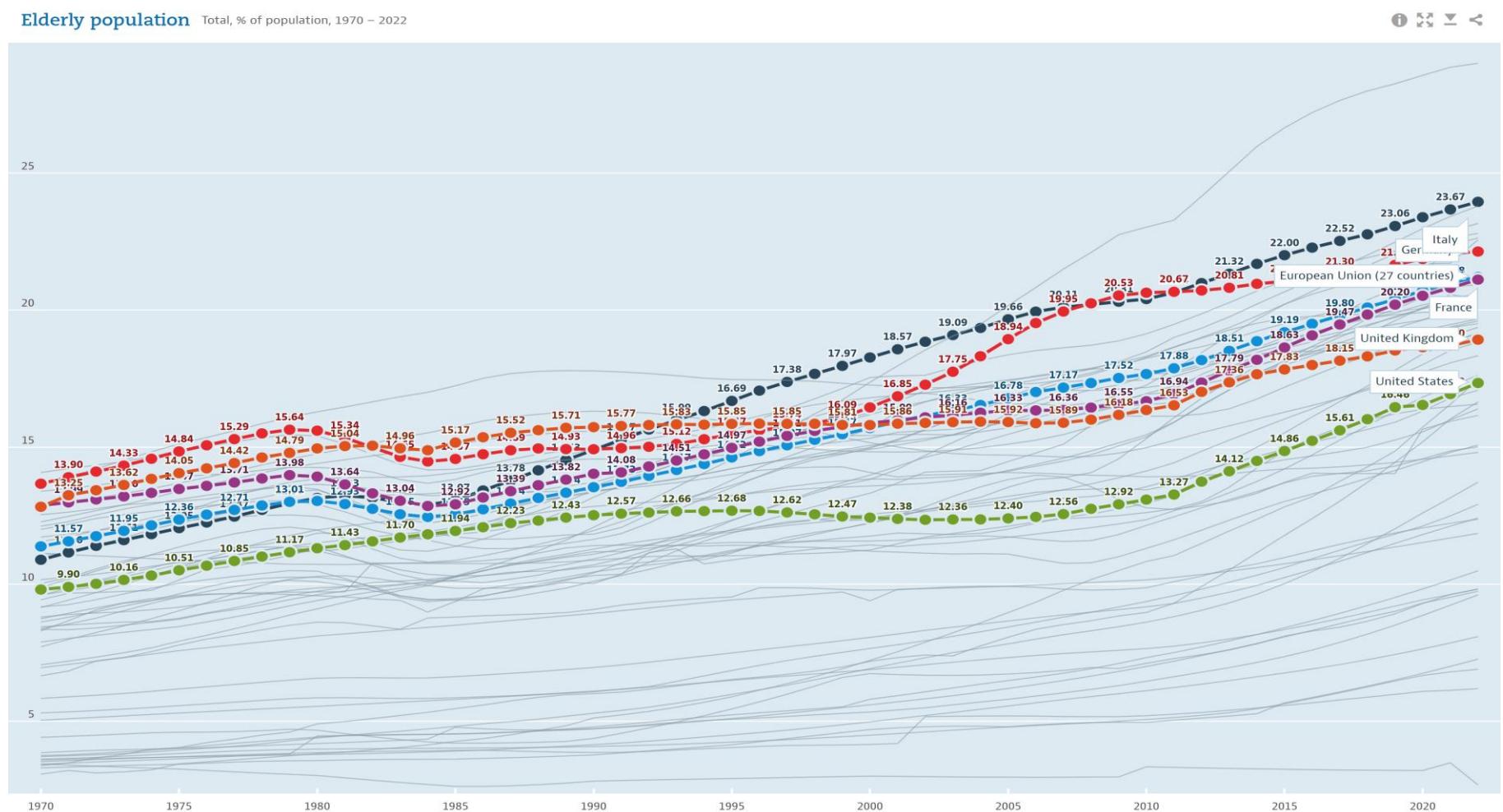
Ecommerce business bubble during Covid and conservative projection post-Covid.

*La burbuja del negocio en e-commerce durante el Covid y la proyección conservadora después del Covid.*

# Market changes

## Economic Factor

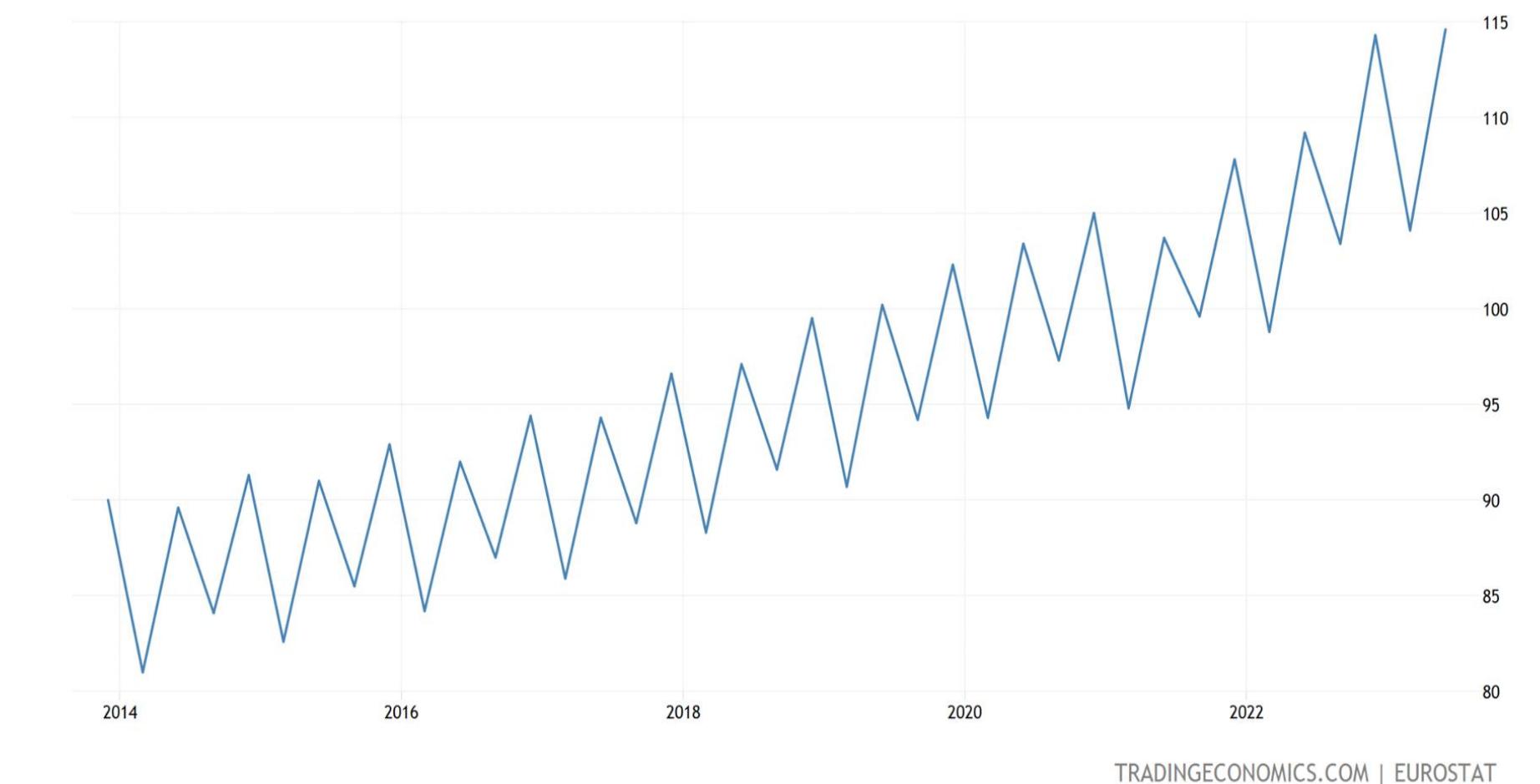
### Elder Population



European union facing labor shortage in long term

*La Unión Europea enfrenta escasez de mano de obra a largo plazo.*

### Labor Cost

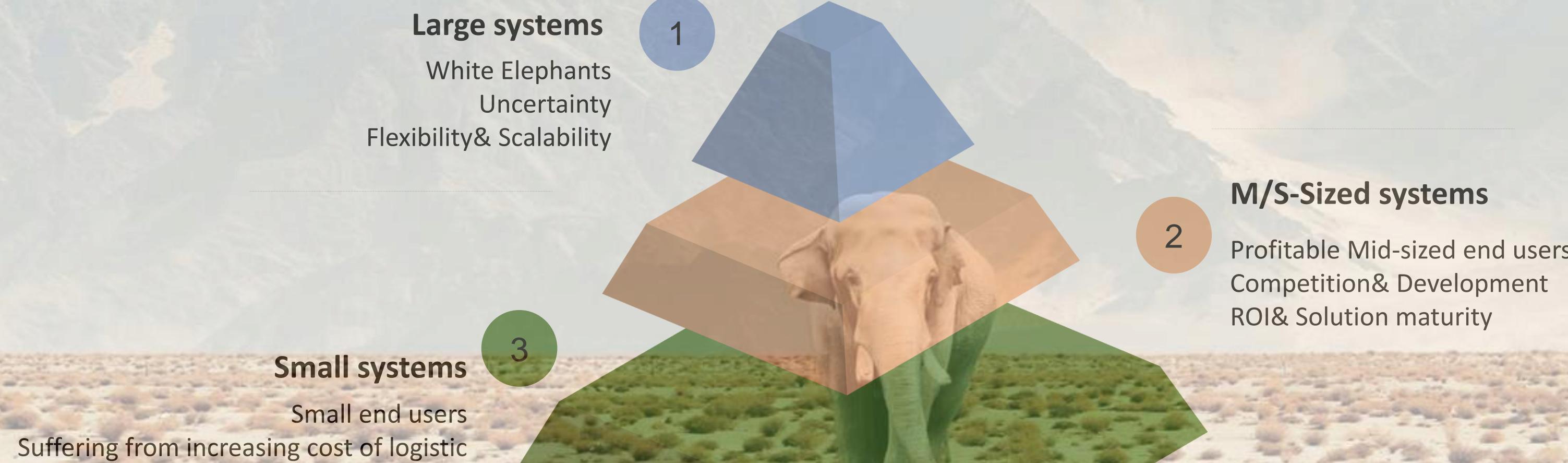


Labour Costs in European Union averaged 91.08 points from 2009 until 2023, reaching an all time high of 114.60 points in the second quarter of 2023.

*Los costos laborales en la Unión Europea promediaron 91.08 puntos desde 2009 hasta 2023, alcanzando un máximo histórico de 114.60 puntos en el segundo trimestre de 2023.*

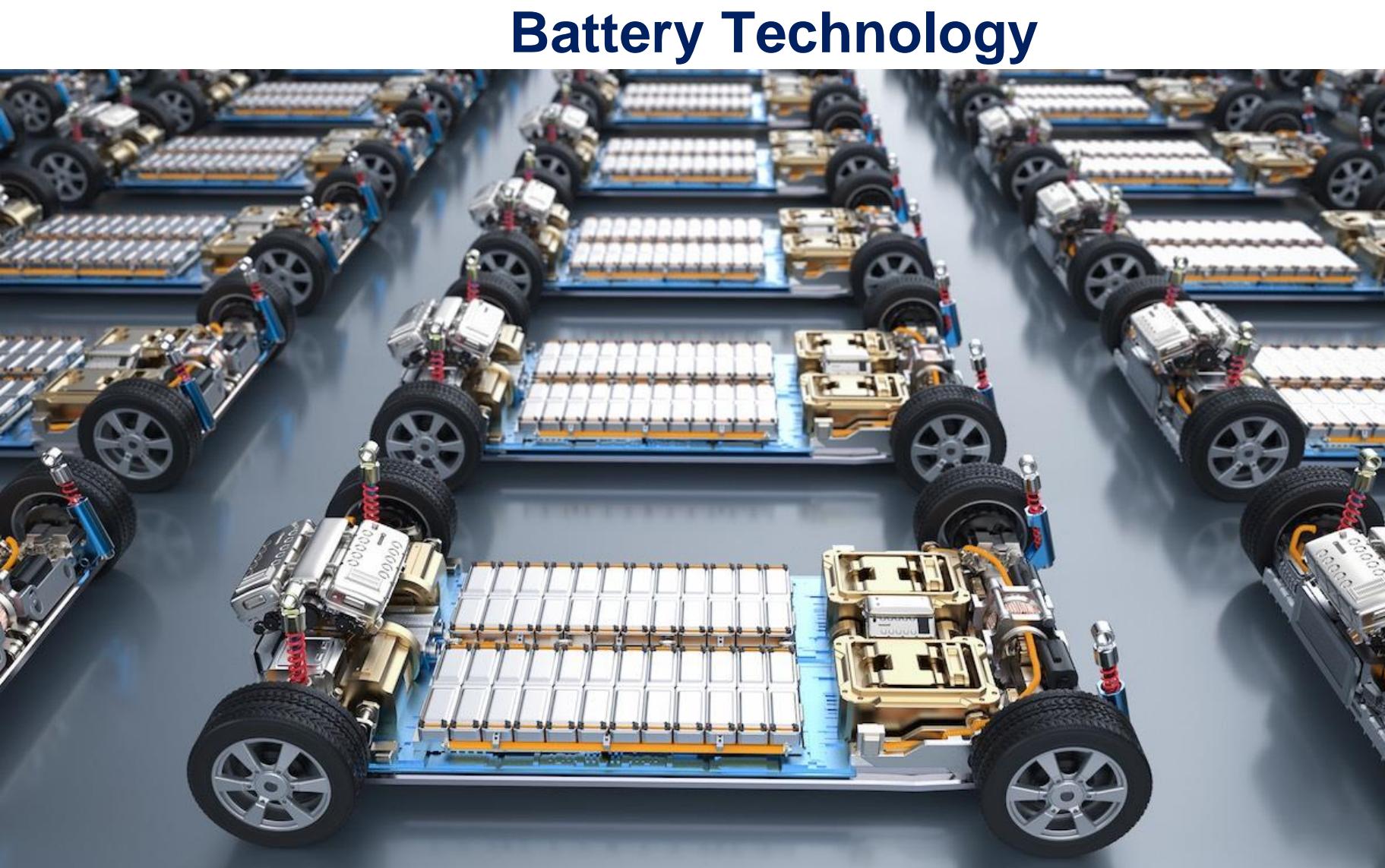
# Market changes

## Customer demand factor



# Market changes

## Technological Factor

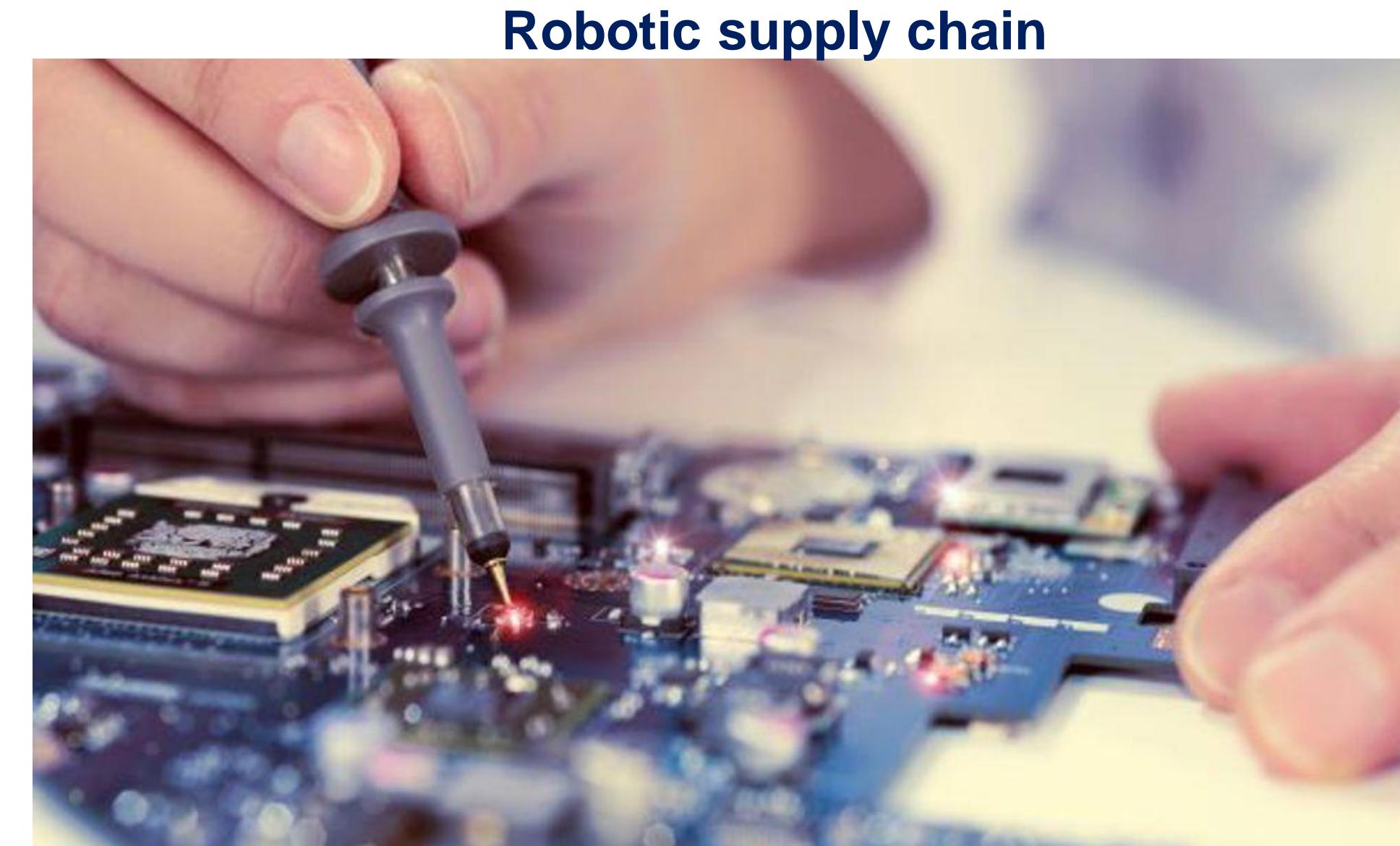
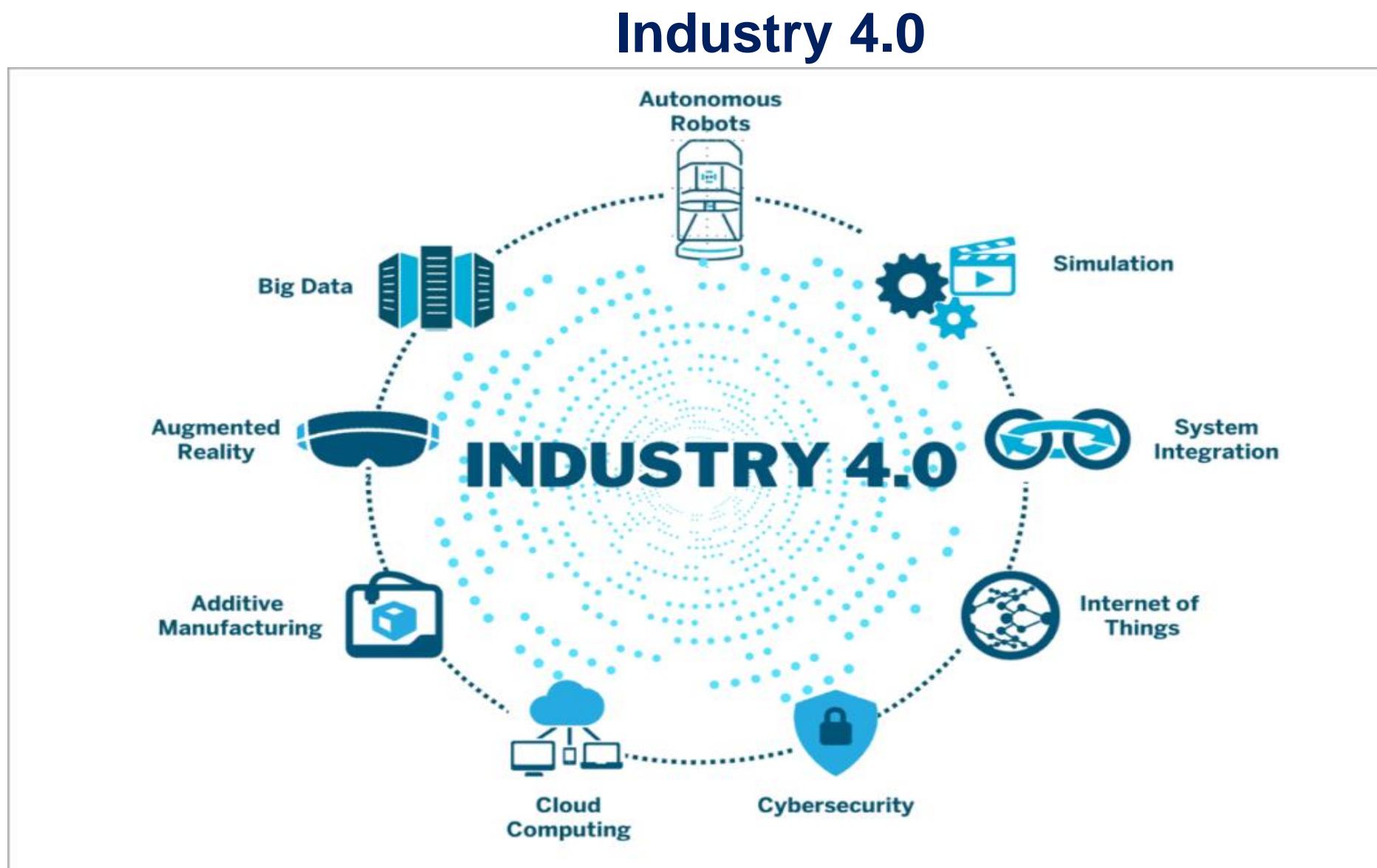


Thanks to the dynamic growth of EV industry, battery and AI technology was well developed during the past years, to enhance the robot work efficiency.

*Gracias al crecimiento dinámico de la industria de vehículos eléctricos, la tecnología de baterías y de inteligencia artificial se ha desarrollado considerablemente en los últimos años, lo que ha mejorado la eficiencia del trabajo de los robots*

# Market changes

## Technological Factor



As part of industry 4.0 strategy, there were over 80 thousands robotic companies in China- 2018. The agile supply chain of robot industry ( including robotic component) is well established to support technological innovation.

Como parte de la estrategia de la industria 4.0, había más de 80 mil empresas robóticas en China en 2018. La cadena de suministro ágil de la industria robótica, incluidos los componentes robóticos, está bien establecida para respaldar la innovación tecnológica.



# Market changes

## Conclusions

### Economical

- High interest rate, low GDP and retail sales performance (Short term)
- High elder population, increasing labor cost, etc (Long term)

### Customer demand

- White elephant hibernating, small/middle system demand growth
- Uncertainty in demand, Main business channel (Ecommerce growth etc.)
- Flexibility, Scalability

### Technology

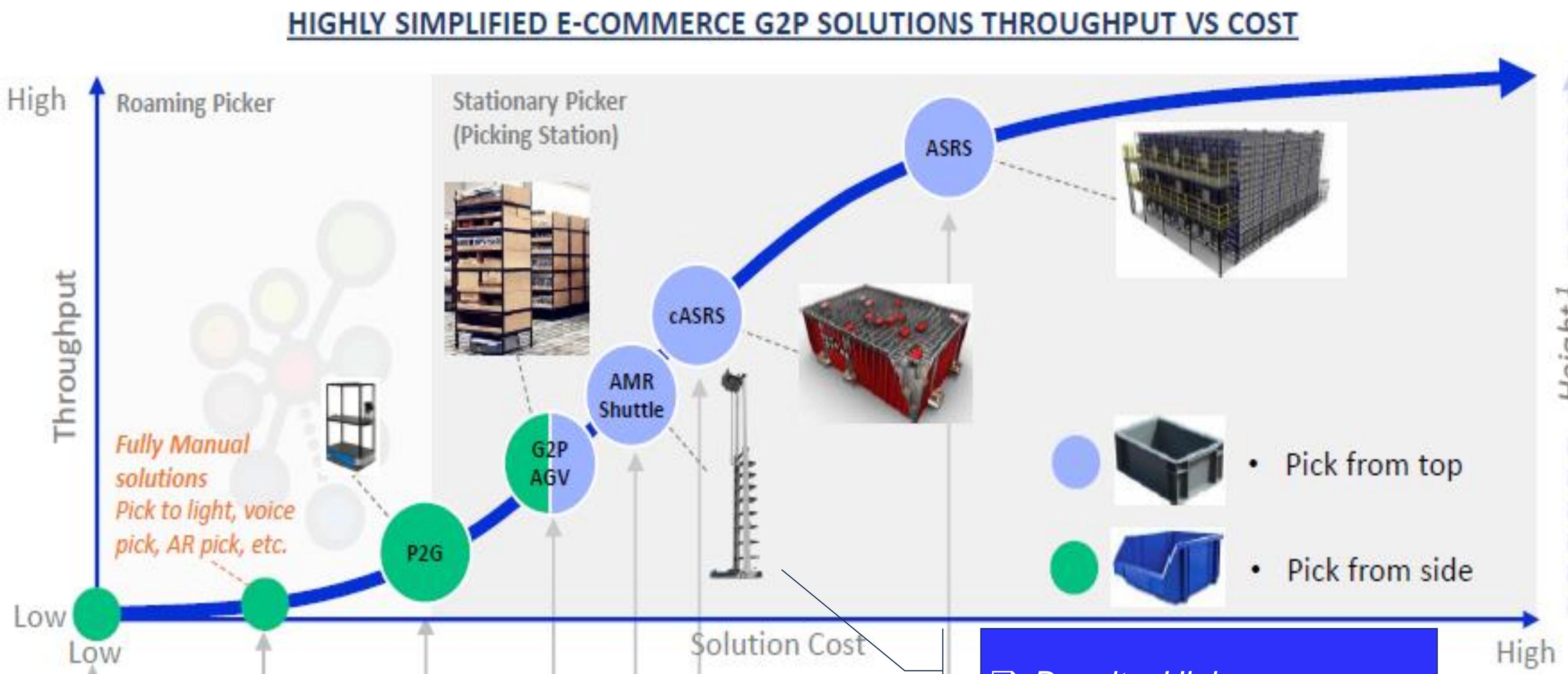
- The robotics technology is reaching a turning point in its development
- AI, battery technology
- Well developed supply chain



## Part 2

### Hai Robotics' Offer

# Solutions in Logistic Automation Market



- Density: High
- Throughput: Medium
- Flexibility: High
- Scalability: High

# Solutions in Logistic Automation Market

HAIPICK  
SYSTEM

1

Essential goods-to-person automated picking system



HAIPICK  
SYSTEM

2

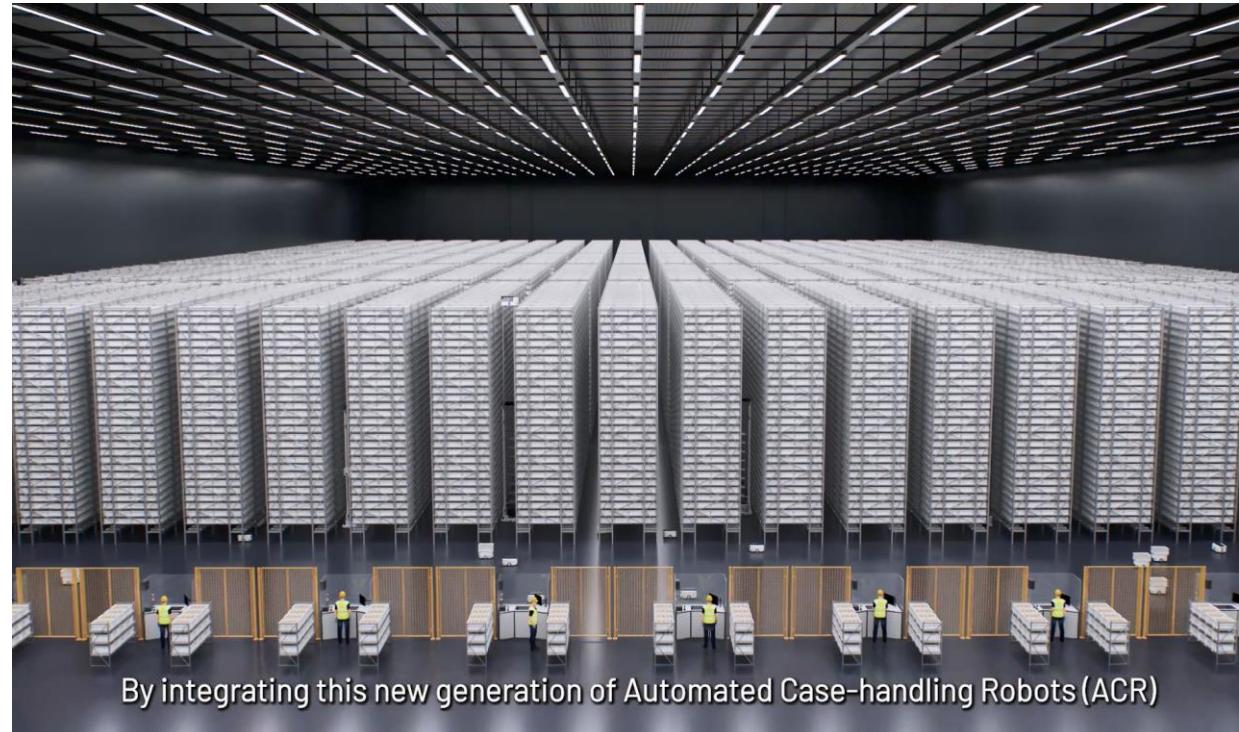
Versatile shape & load performance system



HAIPICK  
SYSTEM

3

Cutting-edge ultimate storage density system



- Totes& Cartons
- Pure ACR solution
- Max Density: 28 case/ m<sup>2</sup>
- Max. Throughput: 0.75 case/h/m<sup>2</sup>

- Totes, Cartons & Pallets
- ACR+ GTP AGV
- Max Density: 28 case/ m<sup>2</sup>
- Max. Throughput: 0.75 case/h/m<sup>2</sup>

- Totes & Cartons
- ACR+ Mini AMR
- Max Density: 47 case/ m<sup>2</sup>
- Max. Throughput: 1.2 case/h/m<sup>2</sup>

Density: **68%**  
Throughput: **60%**  
In **1.5** years



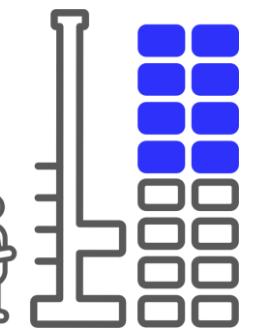
## Part 3

# Hai Robotics' Strategic Intent & Position

La Intención Estratégica y Posición de Hai Robotics



# Long-term Strategic Intent



## Market Leader

- Committed to be **market leader** in robotic automation sector

- *Comprometidos en ser el **Líder del mercado** en el sector de la robótica*

## Product-Oriented Company

- Strive to create unmanned warehouses
- Aim to develop **multiple world-leading hardware product lines and software platform**

- *Trabajar en pro de crear almacenes autónomos*
- *El objetivo es desarrollar múltiples líneas de productos de hardware y software líderes en el mundo*

## Prioritize SA & Partnership

- Continuously improve products and solutions by **prioritizing the needs of our strategic accounts (SA)**
- **Forge strong partnerships** to serve every warehouse and factory effectively

- *Mejorar continuamente los productos y soluciones al **priorizar las necesidades de nuestras cuentas estratégicas (SA)***
- *Forjar asociaciones sólidas para servir de manera efectiva a cada almacén y fábrica*

# Hai Robotics' Position

## A Robotic Product Supplier

### R&D Resources



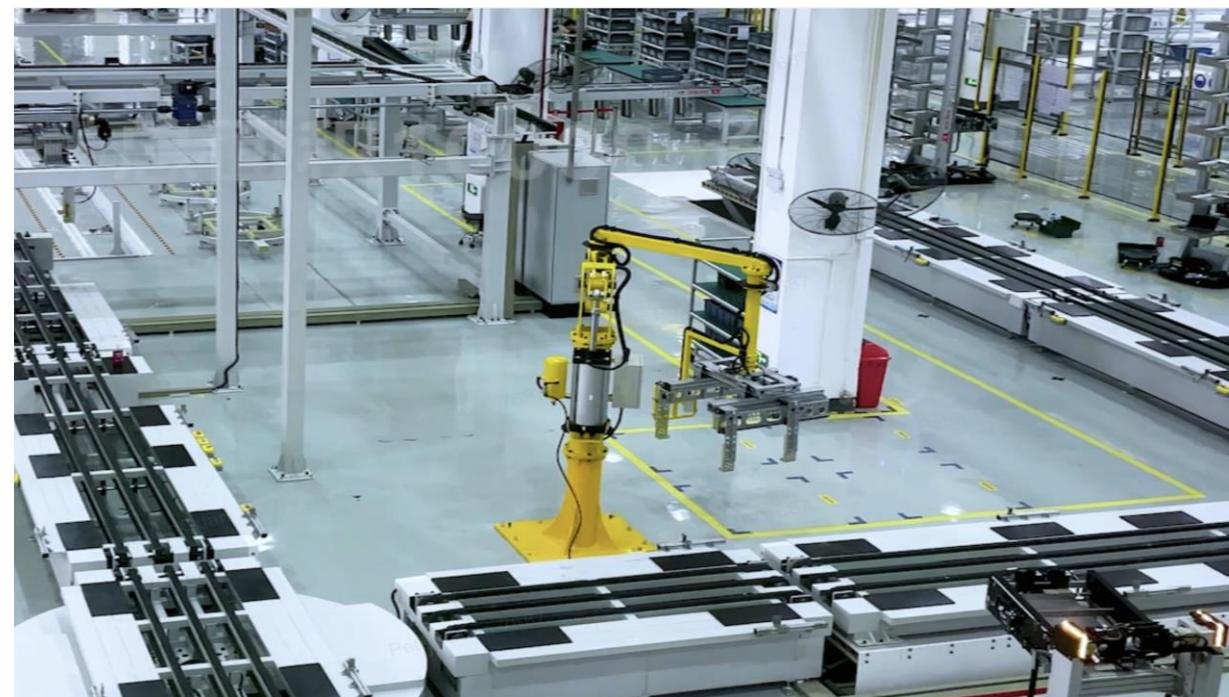
- 350+ Software engineers
- 400+ Hardware engineers
- 1800+ Patents worldwide

### Components supply



Agile Robot components supply chain support the rapid development of our new products

### Factory



- 2 Factories
- >18,000 ACR, >40,000 Mini AMR
- ISO-9000 Standard





# THANK YOU

