



DOOSAN ROBOTICS

1Q25 Earnings Release

DOOSAN

Disclaimer

The information herein is provided for your information purposes only and contains preliminary figures which may be materially different from the final figures.

Forecasts and projections contained in this material are based on current business environments and management strategies, and they may differ from the actual results upon changes and unaccounted variables. We make no guarantees and assume no responsibility for the use of information provided. We trust your decisions will be based on your own independent judgment.

Financial data in this presentation is on a IFRS consolidated basis.

Chapter 1.

1Q 2025 Results

1Q 2025 Results (Consolidated)

- 1Q sales down -51% y-y due to deferred and adjusted investment by customers/dealers amid uncertainty triggered by US tariff concerns

Units: KRW mn, %

	'24.1Q	'24.4Q	'25.1Q	QoQ	YoY
Sales	10,882	11,490	5,280	-54.0%	-51.5%
Operating Profit	-6,886	-16,858	-12,106	-	-
EBITDA	-5,694	-15,179	-10,626	-	-
Net Income	-2,847	-23,126	-9,418	-	-
Net Debt	-371,006	-275,216	-263,321		
Liability/Equity Ratio (%)	3.7%	4.8%	3.4%		

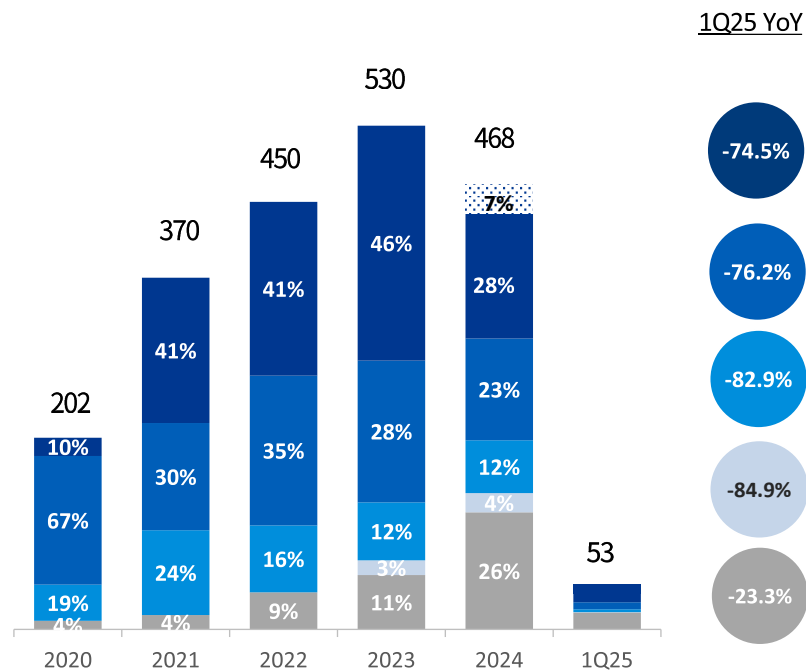
Revenue breakdown by series, region

- Sales weakened across all regions amid persistent US tariff policy uncertainty and a prolonged global manufacturing slowdown

[Revenue breakdown by series]

Unit: KRW00m,%

■ Solutions, Others ■ Series E ■ Series A ■ Series M ■ Series H
 ☆ Series P

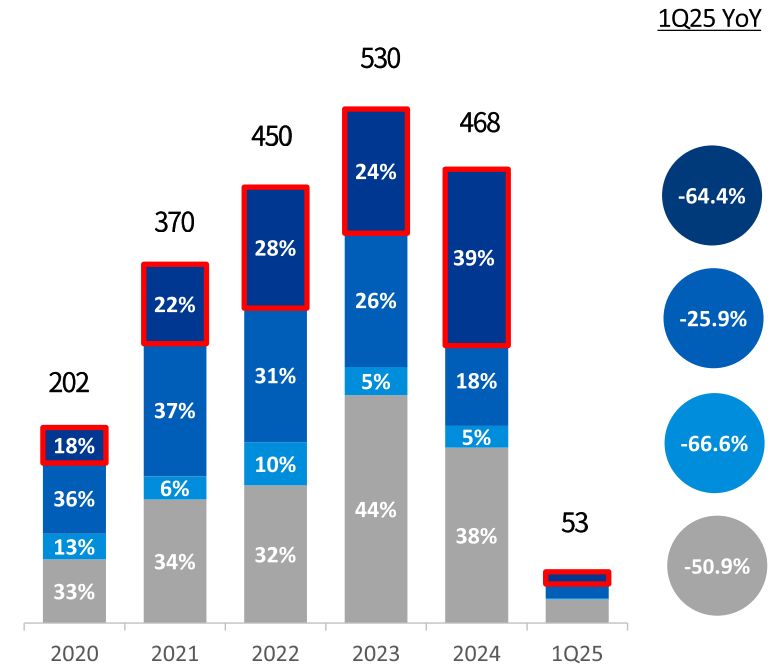


* Source: Company Data

[Revenue breakdown by region]

Unit: %

■ Domestic ■ APAC & Others ■ Europe ■ North America



* Source: Company Data

Chapter 2.

AI-driven Technology Innovation

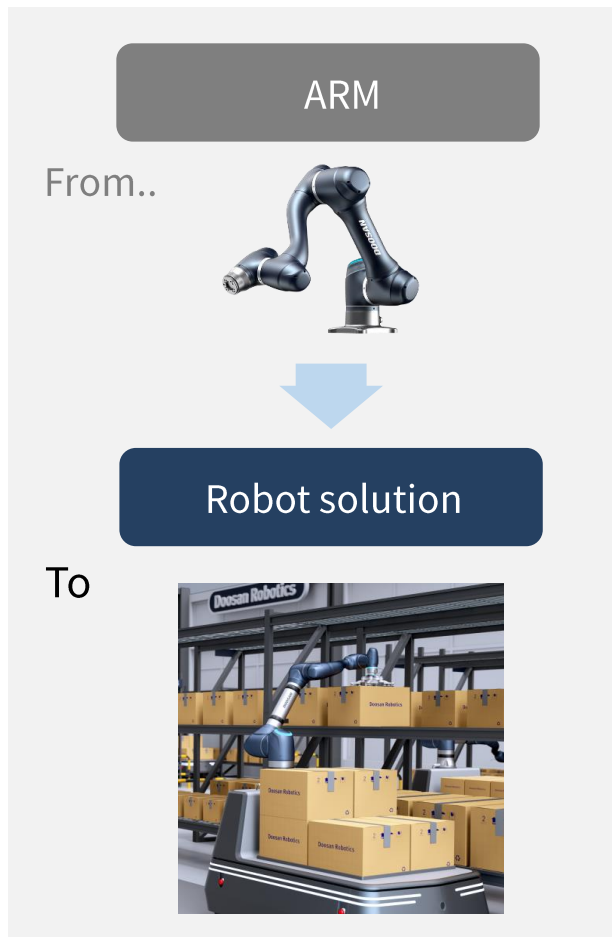
Driving AI-driven innovation for 'Practical humanoids' business

- Pursuing AI-driven innovation over the next 2~3 years and strengthening the talent pool for Humanoid entry
- Enhancing internal technological capabilities through M&A, strategic partnerships

2025 growth strategy	Roadmap	Progress status
<ul style="list-style-type: none"> • Strengthening business model to AI robot solutions <ul style="list-style-type: none"> – Integrating Arm + S/W + AI 	Plug & Play	<ul style="list-style-type: none"> • Scheduled launch of AI robot solution in 4Q <ul style="list-style-type: none"> – Targeting manufacturing and logistics applications
<ul style="list-style-type: none"> • Advances in AI Technology <ul style="list-style-type: none"> – Securing preemptive AI & Humanoid technologies 	Future technologies	<ul style="list-style-type: none"> • Mass recruitment of AU/Humanoid experts <ul style="list-style-type: none"> – 25% headcount growth by year-end – R&D center launch in 3Q • Participation in K-Humanoid Alliance
<ul style="list-style-type: none"> • In-organic growth through M&A 	Dominant market position	<ul style="list-style-type: none"> • Conducting due diligence on North America proven solutions engineering firms <ul style="list-style-type: none"> – To be announced in 3Q • Exploring collaboration with core AI Tech firms
<ul style="list-style-type: none"> • Synergistic through Doosan Bobcat <ul style="list-style-type: none"> – Cooperation with Bobcat Channels in US market 	Sales Scale up in US	<ul style="list-style-type: none"> • Sold 20 Palletizing solutions by end-2024 <ul style="list-style-type: none"> – User needs & customer journey-in progress • Ongoing talks with 9 Bobcat dealers

[BACK-UP] Strengthening business model to Robot Solutions

- Transitioning to an AI robot solutions model integrated with Arm, S/W and AI – departing from arm-only sales
- Driving new market creation through enhanced user convenience, along with higher ASP, and securing strong profitability



Baggage Handling



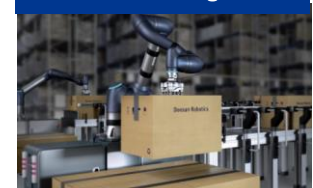
- Picks up a baggage from the transport conveyor

Medical



- Assist laparoscopic surgery

Palletizing



- Product palletizing

EV Charging



- Automatic charging solution

Machine Tending



- Loading and unloading

Shooting



- Filming

Welding



- Automated welding

Coffee barista



- Automated barista process

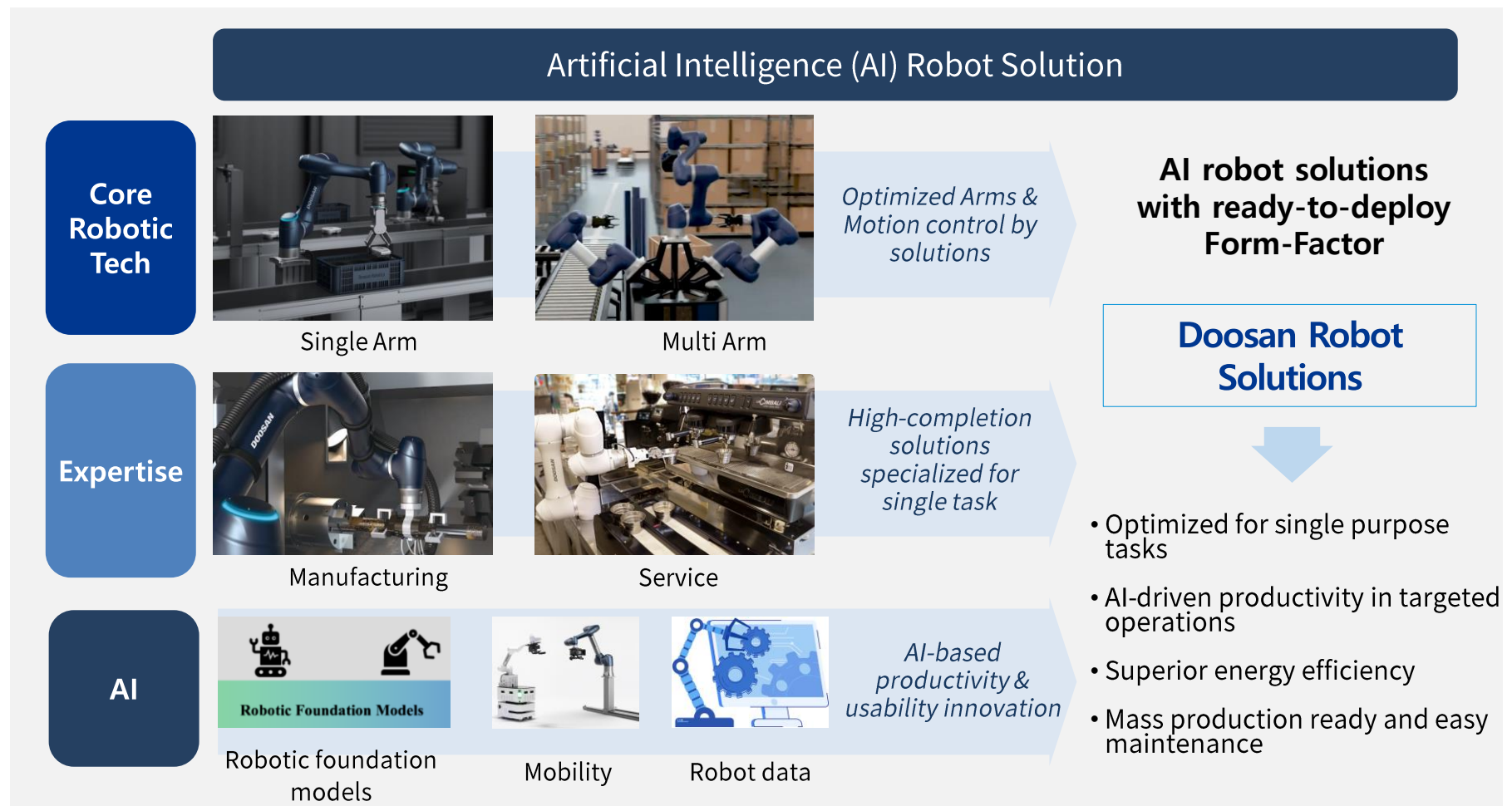
Sanding/Polishing



- Post-processing task that requires consistent quality

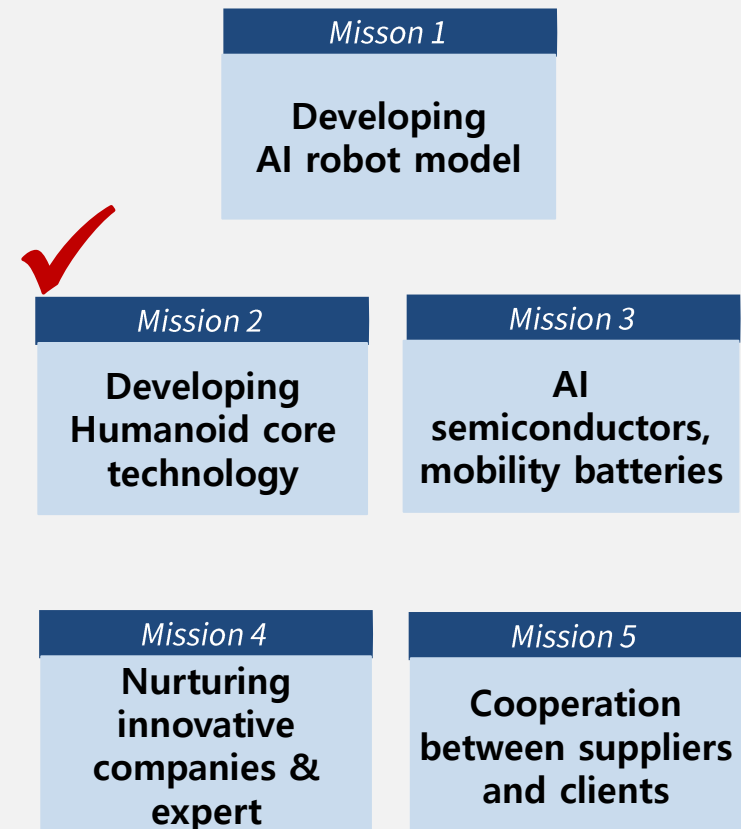
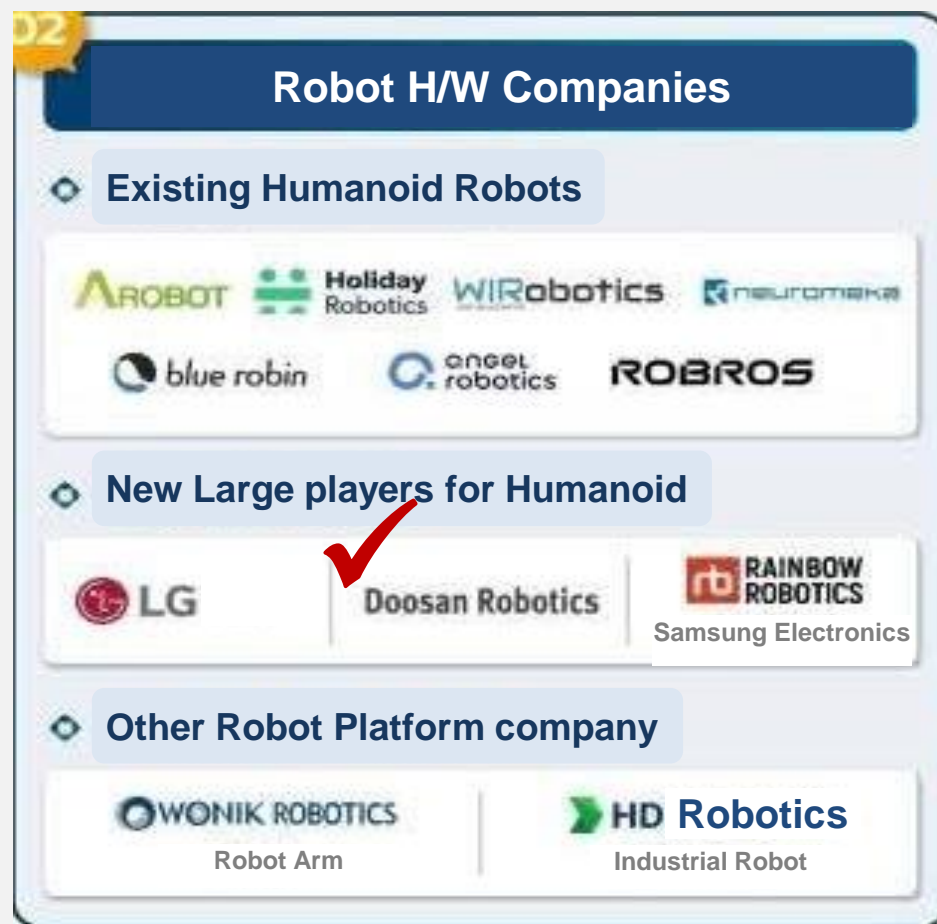
[BACK-UP] To-Be Business Model : Artificial Intelligence(AI) Robot Solutions

- Developing plug & play robot solutions model with mission-ready Form-Factor and embedded AI
- Enhancing engineering and AI capabilities for AI robot solutions through M&A, global partnerships



[BACK-UP] Participation in the K-Humanoid Alliance

- Joined the K-humanoid alliance organized by Korea government to develop core humanoid technologies
- Expected to support over KRW 1 trillion in investment by 2030



[BACK-UP] Growth strategy in US market through synergies with Doosan Bobcat

- Exploring additional opportunities on the current Doosan group governance structure
- Expanding US sales for palletizing solutions through channel cooperation with Bobcat
- Scaling up a business by strengthen sales capabilities in US market

Market lead in US, the largest automation market

- **North America and Europe are the largest markets in automation**
 - Nort America and Europe, with high labor cost, are expected to remain the two largest market for the next decade
 - Working-age population in high-income countries⁽¹⁾ 65% in 2022 → 60% by 2042
 - Labor Shortage after retirement of baby boomers
 - In US, increasing demand for new factories and automation solutions due to reshoring initiatives
- **Building a strong presence in US market**
 - Aiming for US Top 3 in collaborative robot status
 - Achieving market lead in packaging via high-payload series
- **Strengthening business capability for US market leadership and Bobcat synergy**
 - Planned 7 increase in sales staff, 4x in service staff
 - 3 new sales offices planned in US major city

Expected Benefits

- ① **Expanding presence in advanced markets**
 - Leveraging Doosan Bobcat's sales network in North America and Europe as a base for aftermarket service (Robotics c.#60, Bobcat c.#1,500)
- ② **Cross-selling of forklifts and palletizers**
 - Feasible to immediately provide palletizers to existing forklift customers
- ③ **Building reference by leveraging Bobcat**
 - Increase of captive sales based on the supply of factory automation solutions to 17 facilities
 - Utilization of Bobcat's production facilities as test beds for the development of new solutions and services
- ④ **Pre-emptive entry into the professional service market**
 - By collaborating with Bobcat, which has a global track record in construction, agriculture and logistics, new solutions like mobile manipulators will be developed to enter and secure a leading position in the professional services market

Chapter 3.

Appendix

Financial Summary

Financial Summary

Units: KRWmn, %

	2021.12	2022.12	2023.12	2024.12	2025.03	YoY
Total Asset	29,445	62,618	456,422	421,691	406,698	-14,993
Current Asset	19,663	38,837	426,105	342,029	323,592	-18,437
- Cash & Cash Equivalent	4,390	8,119	382,006	275,216	263,321	-11,894
Non-current Asset	9,783	23,782	30,317	79,662	83,106	3,444
Total Liability	13,943	19,853	17,614	19,190	13,401	-5,789
Current Liabilities	11,809	14,737	13,353	15,446	9,489	-5,958
- Debt	-	-	-	-	-	-
Non-current Liabilities	2,134	5,116	4,261	3,743	3,912	168
Total Equity	15,502	42,765	438,808	402,501	393,298	-9,204
Net debt*	-4,390	-8,119	-382,006	-275,216	-263,321	11,894
Liability/Equity Ratio	89.9%	46.4%	4.0%	4.8%	3.4%	-1.4%pt

* Net debt : Debt – Cash & Cash Equivalent