NEUROBOT

NeuroBot NB

The Convergence of Industrial and Humanoid Robots: Dawn of Next-Generation Intelligent Automation

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Dawn of the Next-Generation Intelligent Automation

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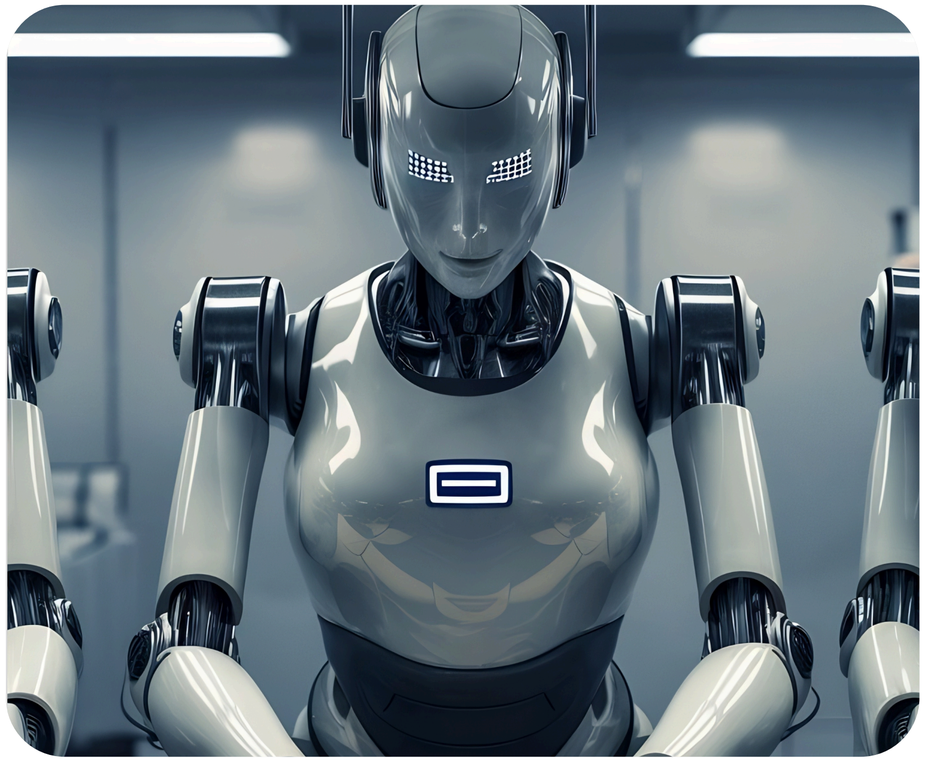
1
Intro

A New Paradigm of Robotics

1.1. Overview

Amid the wave of the Fourth Industrial Revolution

Robotic technology has become a key force reshaping human life and industry.
From precise industrial machines to humanoid robots interacting with people, robotics is now deeply embedded in society.
Yet the market remains divided between industrial automation and human-centered services, creating barriers such as poor interoperability, high costs, and limited scalability.



The NeuroBot Project begins precisely at this point

We propose a new Convergent Robot paradigm that fuses the precision and efficiency of industrial robots with the mobility and adaptability of humanoid robots
—removing the boundary between the two domains.

NeuroBot goes beyond a mere hardware combination.
By leveraging an AI-based unified control system and a blockchain-enabled, decentralized robotics ecosystem, our goal is to realize truly intelligent automation.

This whitepaper outlines the market problems NeuroBot aims to solve,
our innovative technical solutions, and the vision for a transparent and efficient robotics ecosystem powered by the BEP-20–based NB token.

1.2. Current Status and Growth of the Robotics Market

Growth in the Humanoid Robotics Sector

Global Industrial Robot Installations
Over 500K units for 3 consecutive years

According to the International Federation of Robotics (IFR), global industrial robot installations surpassed 500,000 units for the third consecutive year in 2023, with more than 4.3 million robots currently operational worldwide.
This surge is driven by increasing digital transformation and automation demand across manufacturing industries.

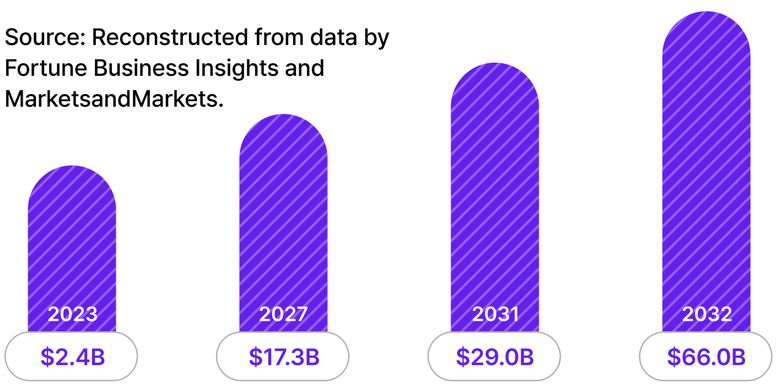
Global Humanoid Robot Market
Projected to reach $66B by 2032

The humanoid robotics market is expanding rapidly — from $2.4B in 2023 to $66B by 2032.
NVIDIA CEO Jensen Huang calls this rise of "Physical AI" a major shift for manufacturing and logistics, as the market converges toward intelligent automation.

Global Market Growth Forecast for Humanoid Robots

(Unit: Billion USD)

Source: Reconstructed from data by Fortune Business Insights and MarketsandMarkets.



Industrial Robotics Market

Focuses on automating precise, repetitive tasks in fixed environments such as automotive and electronics manufacturing, aiming for higher efficiency and productivity.

Service and Humanoid Robotics Market

Operate in dynamic fields like logistics, healthcare, and education, emphasizing mobility, adaptability, and safe interaction with humans.

1.3. Challenges: Limitations of a Fragmented Market

The division between industrial and service robotics reveals clear limitations.

Although the robotics market continues to grow rapidly,
the clear divide between industrial and service domains reveals significant limitations.
From the user's perspective, this fragmentation creates several practical challenges.

Complex Selection & Higher Burden

With numerous manufacturers offering incompatible standards and specifications, finding a suitable solution requires excessive time and cost.

Low Flexibility & Scalability

Once installed for a specific task, most robots cannot be easily adapted to new purposes or environments, making it difficult to respond to rapidly changing market demands.

High Integration & Maintenance Costs

Hardware and software are often supplied separately,
leading to extra costs and technical complexity during integration.

Data Fragmentation

Independent systems generate isolated data,
hindering overall process optimization and predictive maintenance.

These issues prevent robotics from realizing its full potential, especially discouraging SMEs from adopting automation due to high costs and technical barriers.

1.4. Vision of NeuroBot: Synergy through Convergence

Overcoming the Limits of the Robotics Market through Convergence

NeuroBot seeks to overcome the limitations

robotics market via convergence

Our vision is to unite the power of industrial robots and the intelligent flexibility of humanoids into a single platform, delivering a new level of automation once thought impossible.

WE MAKE THE ROBOT SERVICE FOR EVERYONE.

NeuroBot envisions a world where robotics is accessible to everyone, beyond the boundaries of specific industries or purposes.

From factory workers to classroom students, our ultimate goal is to build an open and flexible ecosystem where everyone can benefit from robotic technology.

Integration

Single Solution

We provide an integrated platform combining hardware, software, and AI technologies, enabling users to meet diverse needs through a single solution.

Creativity

Intuitive Development Environment

We offer an intuitive development environment and tools that enable anyone to easily turn ideas into robots, accelerating the popularization of robotic technology.

Synthesis

Platform for Creating New Value

Through a blockchain-based open community, we provide a platform where experts across industries, education, and the arts can collaborate to create new value.

The NeuroBot Convergence Platform acts as an intelligent collaborative worker moving across production lines in factories, and a hands-on educational tool that safely demonstrates and programs industrial robotics in classrooms. This cross-industry and educational innovation will drive new growth momentum across the entire robotics sector.

2
Synthesis

NeuroBot Solution: The Technology of Convergence

2.1. Core Technology: Converged Robotics Platform

Seamless Flexibility and Scalability of Humanoid Robotics

The core of NeuroBot lies in integrating the strengths of industrial and humanoid robots into a single converged robotics platform.
This modular system combines hardware, an integrated software stack, and AI-based control intelligence, delivering exceptional flexibility and scalability.

Application Layer — Factory automation | Education & Research | Logistics & Delivery | Service & Entertainment

Platform Layer — Neuro-OS (Integrated OS) | AI Control System (ICU) | Digital Twin | Blockchain (NB Token)

Hardware Layer — Autonomous Mobile Platform (AMP) | Multi-purpose Robot Arm | Modular End-Effector | Sensors (LiDAR, Camera)

2.2. Application Area 1: Future Factory Automation

NeuroBot transforms the factory paradigm.

Traditional factory automation relied on repetitive, fixed-position tasks along conveyor belts.
NeuroBot breaks this paradigm.
By combining an Autonomous Mobile Platform (AMP) with a multi-purpose robot arm,
NeuroBot is no longer confined to one fixed position.

Multi-Process Handling

A single robot can move parts from Line A to an assembly station on Line B, perform precise assembly tasks, and transfer them for inspection — all autonomously.

Adaptable to Flexible Production Lines

When production items change, downloading new software instantly switches tasks —
no need for new robots or line changes, minimizing downtime and maximizing efficiency.

Human-Robot Collaboration

Equipped with safety features, NeuroBot handles heavy or dangerous tasks, allowing humans to focus on creative, higher-value work.

Such innovation will enhance competitiveness in future manufacturing environments where small-lot, multi-product production is key.

2.3. Application Area 2: Innovation in Educational Humanoids

NeuroBot presents a new solution for the education market.

The NeuroBot platform allows students to experience and learn core industrial technologies right from the classroom.

The importance of robotics education is growing, but conventional educational robots remain limited to basic coding, offering little connection to real industrial applications.

NeuroBot addresses this gap with a practical learning platform that mirrors real-world technologies used in industrial environments. Students can learn future industry technologies directly in the classroom through hands-on experience.

Practical Industrial Robotics Education

Using NeuroBot, students can simulate smart factory processes such as logistics, assembly, and inspection. This fosters problem-solving skills that go beyond theoretical knowledge.

Safe Humanoid Interaction

Equipped with industrial-grade safety and AI motion control, NeuroBot ensures safe collaboration for students. Collision sensors and AI-based motion prediction prevent unexpected accidents.

Step-by-Step Learning Content

From block coding to Python and ROS (Robot Operating System), NeuroBot offers structured content for all levels — beginner to expert.

Beyond basic kits, NeuroBot aims to revolutionize robotics education. According to Data Bridge Market Research, the global educational robotics market is expected to reach $5B by 2030 — and NeuroBot is ready to lead this transformation.

Example of the next-generation educational robot platform that NeuroBot aims to pioneer

2.4. Technological Differentiation

NeuroBot delivers a clear technological distinction.

Compared to existing robotic solutions, NeuroBot integrates and advances the strengths of leading companies such as TEO, JM Robotics, and Roboworks.

HW + SW + AI Integrated Offering

While most competitors focus primarily on hardware, NeuroBot provides a fully integrated package combining hardware, software, and AI solutions. This approach completely resolves compatibility issues and reduces implementation costs.

Customer-Centered Customization

Unlike mass-production robot platforms, NeuroBot offers modular designs tailored to each customer's environment and requirements.

Data-Driven Operation Optimization

NeuroBot analyzes operational data collected from robots to enhance efficiency and predict maintenance needs through AI-powered insights.

Blockchain-Based Ecosystem

Robot operation data, developed applications, and maintenance logs are securely recorded on the blockchain to ensure transparency and reliability. Based on this, NeuroBot enables new business models such as RaaS (Robotics-as-a-Service) subscription services and data exchange platforms.

NEUROBOT

3
NB

NeuroBot (NB) Token Ecosystem

3.1. BEP-20 Token Features

Clear Advantages of Choosing BEP-20

The NeuroBot (NB) token is issued on Binance Smart Chain (BSC) based on the BEP-20 standard. BEP-20 was chosen for the following key advantages.

Low Fees and High Speed

BSC offers lower gas fees and faster block generation compared to Ethereum. This is essential for processing countless micro-transactions within the NeuroBot ecosystem efficiently, such as data exchanges, service subscriptions, and reward payments.

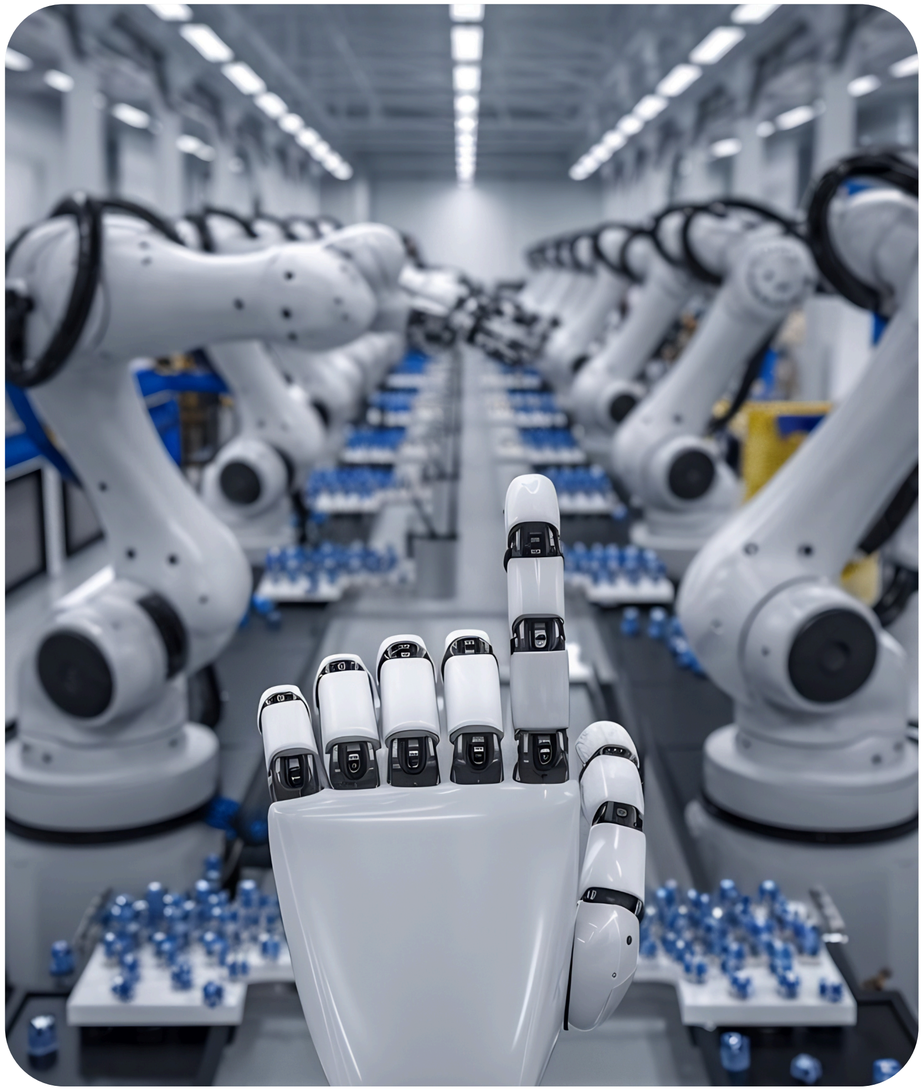
EVM Compatibility

BSC is fully compatible with the Ethereum Virtual Machine (EVM), allowing easy use of Ethereum's rich ecosystem of development tools, libraries, and human resources. This accelerates the development and expansion of the NeuroBot platform.

Robust Ecosystem

BSC already hosts numerous DeFi, NFT, and dApp projects, forming a vast and active network. This provides an ideal environment for NB token liquidity and interoperability with other projects.

Based on these advantages, the NB token will act as the core medium of exchange and value within the NeuroBot ecosystem, connecting and rewarding all participants.



Creating new value through the fusion of AI robotics and blockchain technology.

3.2 Token Information

NeuroBot Token Information

Item	Description
Token Name	NeuroBot
Ticker	NB
Blockchain Platform	Binance Smart Chain (BSC)
Token Standard	BEP-20
Total Supply	5,000,000,000,000,000 (5 quadrillion) NB
Decimal	18

3.3 Role and Utility of the Token

NeuroBot Token Utility within the Ecosystem

NB tokens are designed not merely for value storage within the NeuroBot ecosystem, but to enable diverse utilities. The token plays a key role in driving ecosystem growth and incentivizing participant engagement.

Service Subscription & Payment (RaaS)

Users can subscribe to the Robotics-as-a-Service (RaaS) model using NB tokens — covering hardware rental, software licenses, AI updates, and maintenance. This significantly reduces the initial adoption cost.

Data & Solution Marketplace

Developers can list their robotic applications, AI models, or automation solutions on the marketplace and sell them using NB tokens. Institutions needing field data can also purchase operational data collected by NeuroBot, generating additional revenue.

Ecosystem Participation Rewards

Participants who contribute to ecosystem development — such as providing operational data, reporting bugs, or engaging in community activities — receive NB token rewards. This promotes sustained ecosystem growth and activity.

Governance

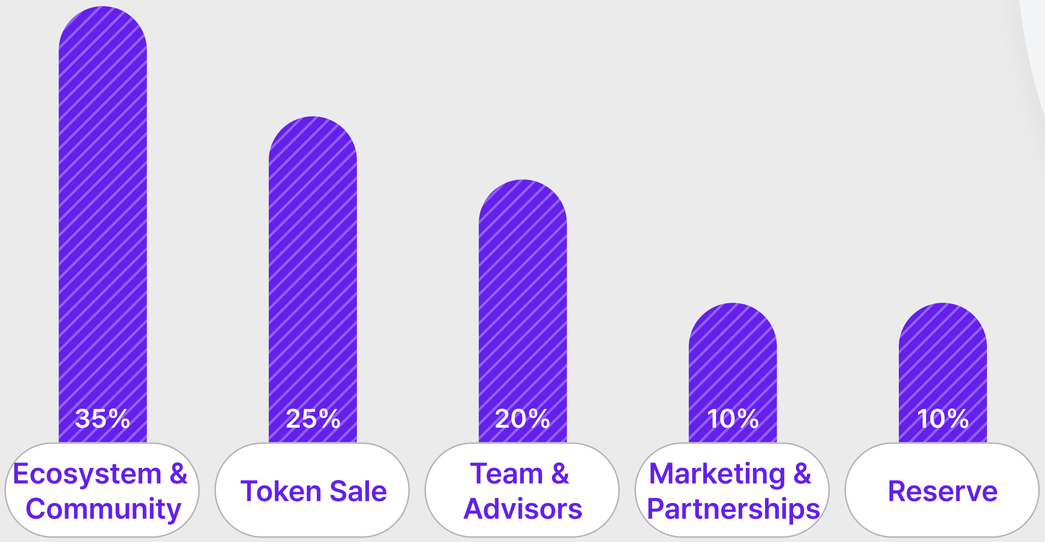
As the NeuroBot ecosystem transitions toward a decentralized autonomous organization (DAO), NB token holders will gain voting rights over platform updates, fee policies, and new partner support decisions.

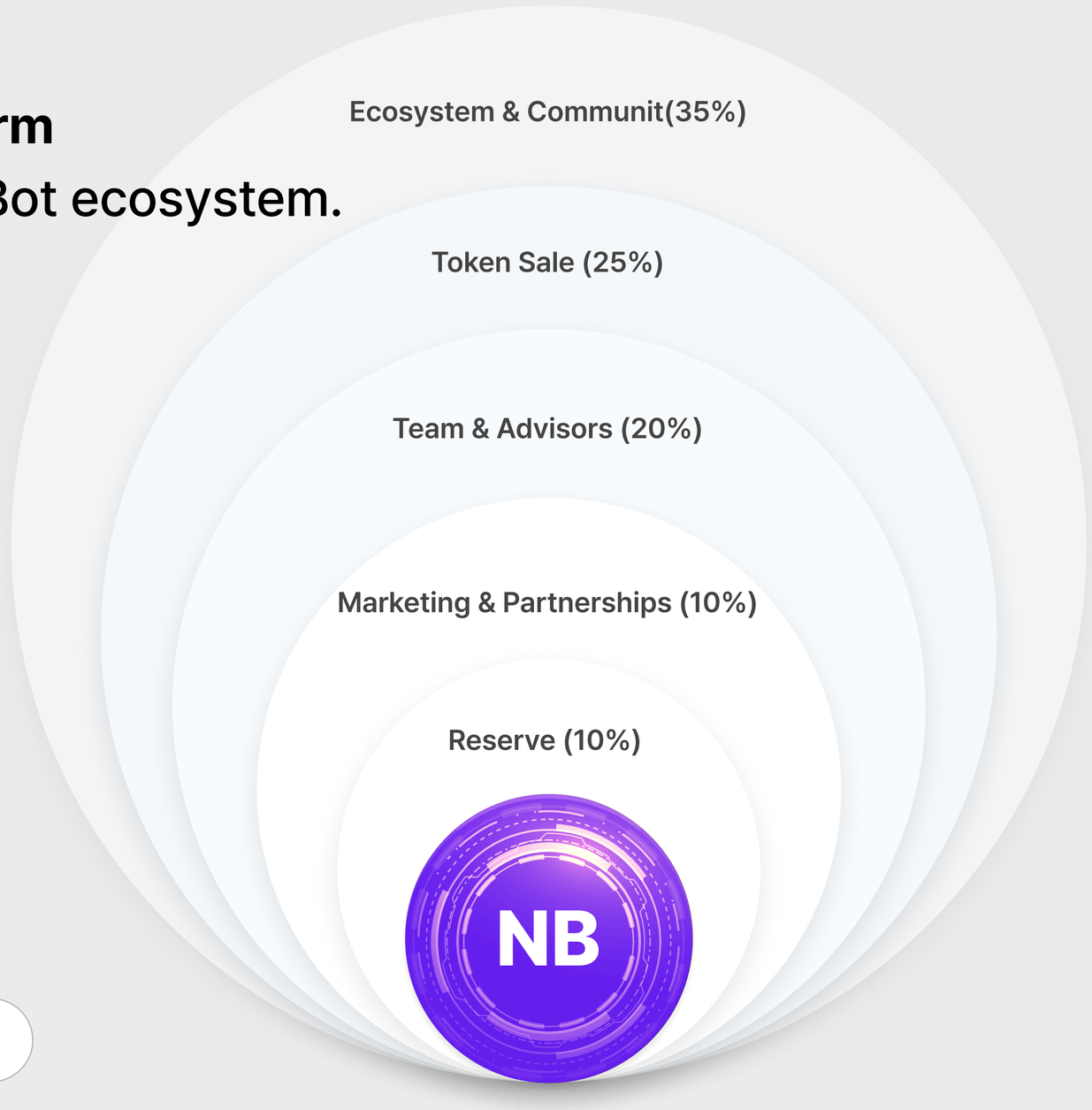
3.4 Token Distribution

Total Supply: 5 Trillion NB Tokens

The total of 5 trillion NB tokens
will be distributed to ensure long-term
and sustainable growth of the NeuroBot ecosystem.

The specific allocation ratios and lock-up policies for each category will be disclosed transparently through future documentation.





4
Market

Market Analysis and Competitive Advantage

4.1. Market Size & Outlook

Industrial and Service Robot Markets

NeuroBot aims to bridge the industrial and service robot markets — particularly in education — creating a powerful synergy that captures the growth potential of both sectors.

Global Industrial Robot Market

As of 2024, steady growth continues, driven by demand for smart factories and increased automation.

Global Humanoid Robot Market

Expected to grow explosively with a CAGR exceeding 50%, projected to reach $29B by 2031.

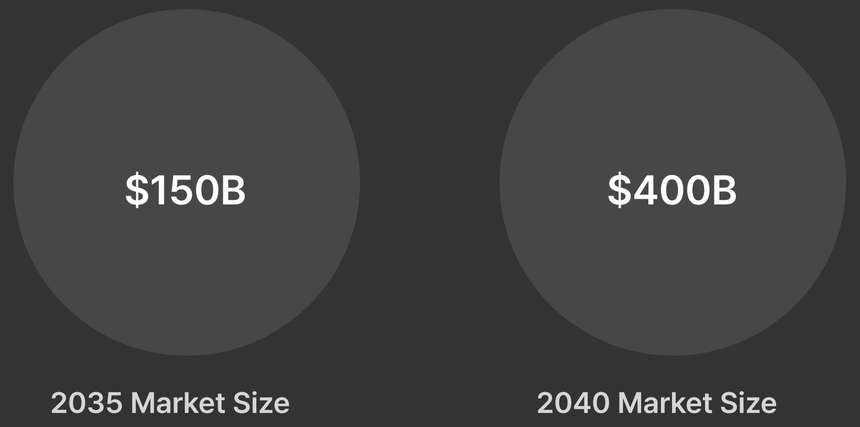
Global Educational Robot Market

Expected to reach $5.9B by 2031 as AI and coding education gain importance worldwide.

By the mid-2030s, the AI humanoid market is expected to enter a rapid “quantum leap” growth phase.

Post-2035 AI Humanoid Market Outlook

The era of “Physical AI” will transform every industry through humanoid robotics.



CAGR (2023–2040): ~65%

Source: Reconstructed and analyzed by NeuroBot based on forecasts from global market research institutions.

Based on this explosive growth, NeuroBot aims to secure at least 1% market share in humanoid robotics by 2035, equivalent to roughly $15B (≈$_2$조 원) in potential revenue.

Beyond market participation, NeuroBot seeks to establish and lead a new category — “Converged Robots.”

4.2 Competitive Landscape Analysis

NeuroBot Expands the Ecosystem Through Collaboration

Currently, major players dominate specific sectors of the robotics market.
NeuroBot will both compete and collaborate with these players to expand its ecosystem.

Large Corporations
(e.g., HD Hyundai Robotics, LG Electronics)

Possess strong branding, production capacity, and capital, but their focus on hardware limits rapid adaptation or customization for specific clients.

Specialized Solution Providers
(e.g., TEO, JM Robotics, Roboworks, Mandro)

Offer domain-specific solutions (e.g., food, logistics, education) with strong technical expertise. These companies can be both competitors and partners within the NeuroBot ecosystem, integrating with NeuroBot to reach broader markets.

Humanoid Developers
(e.g., Boston Dynamics, Tesla)

Develop advanced humanoid technologies but remain in early commercialization stages, with high costs limiting mass adoption.

4.3. NeuroBot’s Competitive Advantage

NeuroBot Expands Its Ecosystem Through Collaboration

NeuroBot secures strong competitive advantages that clearly differentiate it from traditional robotics competitors.

Platform Strategy

Flexible response to diverse markets through an integrated platform for industrial and service robotics.

Competitors: Single-purpose robots specialized in limited fields.

Comprehensive Solution Offering

Integrated HW + SW + AI solution enhances convenience and reduces total cost of ownership (TCO).

Competitors: Focused solely on hardware or software.

Modular Ecosystem

Modular OS and design enable fast customization and ecosystem scalability.

Competitors: Closed systems with limited compatibility and innovation.

Decentralized Innovation

Business Model

Blockchain-based token economy ensures transparent data transactions and RaaS implementation.

Competitors: Traditional hardware sales and license-based business models.

5
Roadmap

Roadmap & Future Plans

5.1. Step-by-Step Development Roadmap

NeuroBot Follows a Clear and Practical Roadmap

NeuroBot follows a clear and realistic roadmap for progressive development.

Phase 1: Foundation Building (2025)

Establish team, release whitepaper v1.0, and start token & prototype development.

01

Phase 2: Platform Development (2026)

Launch prototype “MCR-1”, provide Neuro-OS alpha and SDK, and begin RaaS model design.

02

Phase 3: Commercialization (2027)

Release first-generation fusion robot, launch RaaS service, expand partnerships.

03

Phase 4: Decentralization (2028+)

Transition to open-source, adopt DAO governance, expand to new industries.

04

5.2. Long-Term Vision & Expansion Plan

NeuroBot Aims to Become the ‘Android’ of the Robotics Industry

While NeuroBot’s short-term goal is to succeed in the manufacturing and education markets, its long-term vision is far greater.

A World Where NB Tokens Reward Fair Value

Our goal is to make the NeuroBot platform the “Android of robotics” — a global standard. Anyone can build and sell their own robot solutions through the NeuroBot marketplace, earning fair rewards in NB tokens.

Evolving into a Social Technology Platform

NeuroBot will serve as the core infrastructure connecting the physical and digital worlds. Robots will collect real-world data, securely stored and traded on the blockchain, further advancing AI intelligence.

Through this ecosystem, NeuroBot will enhance human life and address key societal issues such as labor and efficiency — evolving into a true “social technology platform.”

6
Team

Team & Partners

6.1 Core Team

Experts with Over 10 Years of Experience Across Key Domains

Our NeuroBot project brings together professionals with over a decade of experience in robotics, AI, blockchain, and business development.

Deep Understanding and Technological Expertise in the Robotics Market

Our team combines profound market insight with innovative technical capabilities to turn NeuroBot's vision into reality.

(Note: Team details will be disclosed progressively through the official website as the project advances.)

6.2. Technical Partnerships

NeuroBot Values Openness and Collaboration.

We go beyond independent development — actively collaborating with leading companies in various fields to create powerful synergies.

Currently Collaborating on On-Device AI, Precision Robotic Hands, and Autonomous Driving.

We are working with top technology partners, including domestic robotics leaders such as Incerclus, Mando, and Roboworks, to form a technology alliance for the co-development of the K-Humanoid project.

Their collaboration model integrates each company's core technologies — AI brains, robotic limbs, and mobility platforms — to create highly advanced integrated robots.

Through these strategic partnerships, NeuroBot aims to accelerate development, ensure top-tier technical precision, and establish a stronger competitive edge in the market.

7
Conclusion

Closing Remarks

7.1. Conclusion

Robots beyond boundaries, intelligent partners in life

Robot technology is now passing an inflection point and entering a new era.
It can no longer be confined within the dichotomy of industry and daily life.
Future robots must go beyond boundaries to act as intelligent partners in all areas of human life.

NeuroBot represents a bold challenge toward that future.

We combine the power of industrial robots with the intelligence of humanoids,
opening doors to possibilities never imagined before.
NeuroBot's integrated platform will maximize factory productivity, transform education,
and contribute to overall societal progress.

A virtuous cycle where every participant contributes and is fairly rewarded

The BEP-20–based NB token provides a transparent and efficient economic system.
Through a structure where every participant contributes and is rewarded fairly,
NeuroBot will become a community-driven platform where everyone grows together.

We have just taken the first step toward a great journey.
We invite you to join us in shaping the new future of intelligent automation with NeuroBot.

7.2. Legal Notice and Disclaimer

This NeuroBot (NB) whitepaper has been prepared solely for informational purposes.

The contents of this whitepaper should not be interpreted as legal, financial, or investment advice. This whitepaper does not constitute an offer to sell or a solicitation to buy securities or financial products in any jurisdiction where such actions would be unlawful.

Token purchase and ownership are entirely the responsibility of the individual.

NeuroBot (NB) tokens are digital assets under development, and their value can be highly volatile, with a risk of total loss. Participants should only purchase or hold tokens at their own discretion, fully aware of the potential risks and able to bear possible financial losses.

Actual results may differ significantly from projections.

Forward-looking statements in this whitepaper involve various risks and uncertainties, and actual results may differ from projections. The NeuroBot team has no obligation to update the information contained in this whitepaper.

Uncertainties in the regulatory environment may impact the operation of the project and token functionality. Investors are responsible for complying with the laws and regulations of their respective jurisdictions.