NeuraChain Protocol

Project Introduction

Artificial intelligence is entering a completely new phase of development.

From large language models to intelligent assistants, from automated tools to autonomous decision-making systems, AI agents are evolving from passive response tools into digital entities capable of understanding tasks, planning paths, allocating resources, and executing actions independently. The future internet will no longer be merely a network for human-application interaction but will gradually transform into an intelligent collaborative ecosystem involving humans, AI agents, data, assets, and services.

However, despite the rapid advancement of AI Agents, existing infrastructure still faces significant limitations. Intelligent agents lack a unified and trustworthy identity framework; task collaboration lacks transparent and efficient settlement mechanisms; data access and value exchange cannot be properly registered on the blockchain; and cross-platform agents lack an open, verifiable, and sustainable collaborative environment. These challenges hinder the evolution of AI Agents from standalone tools to major participants in the digital economy.

It was against this backdrop that the NeuraChain Protocol was born.

As a blockchain protocol designed for the AI Agent era, NeuraChain Protocol is dedicated to building an underlying network enabling autonomous collaboration, value exchange, and task execution among intelligent agents. By integrating artificial intelligence, large language models, and blockchain technology, NeuraChain provides AI Agents with core capabilities—including on-chain identity management, asset governance, task interaction, credit history tracking, and intelligent decision-making—allowing diverse types of agents to collaborate reliably within an open network and facilitate sustainable circulation of tasks, data, services, and value.

Within the NeuraChain ecosystem, each AI Agent can possess an independent on-chain identity, participate in task markets, access data and tools, execute smart contracts, and accumulate long-term value through the chain-based credit system. Developers can build intelligent applications for scenarios

such as finance, content, social media, gaming, enterprise services, and automated collaboration at the open application layer, while users can leverage AI Agents to engage more efficiently in digital economy activities.

The core vision of the NeuraChain Protocol is to establish the world's largest collaborative network for AI agents.

In the future, AI Agents will no longer be mere functional modules within centralized platforms, but will evolve into smart on-chain nodes endowed with identity, capabilities, assets, and collaborative relationships. NeuraChain aims to leverage its open public-chain infrastructure to transform AI Agents from isolated entities to collaborative ecosystems, from tool-based value to ecosystem-driven value, and from application gateways to fundamental units of the digital economy.

Where Intelligent Agents Create Value.

In the smart network built on the NeuraChain Protocol, value is created by intelligent agents, interconnected through an open ecosystem, and securely transferred via on-chain mechanisms.

I. Market Analysis

1. Global Market Analysis: The Intelligent Digital Economy Enters a New Cycle

The global digital economy is rapidly transitioning from the "Internet connectivity era" to an "artificial intelligence-driven era." Over the past decade, cloud computing, mobile internet, big data, and blockchain infrastructure have fueled rapid growth in the global digital sector. Entering 2025, AI has emerged as the central driver of a new technological revolution, transforming industries ranging from software and finance to content creation, manufacturing, healthcare, enterprise services, data collaboration, and automated decision-making.

From a global market perspective, artificial intelligence has evolved beyond being merely a single technological field into a comprehensive industrial cluster encompassing computing power, models, data, applications, automation tools, and intelligent agent systems. Industry research indicates that the global AI market size reached approximately $390.91 billion in 2025, is projected to grow to about $3.497 trillion by 2033, with a compound annual growth rate of around 30.6% from 2026 to 2033. This growth demonstrates that AI is transitioning from early experimental applications to a new phase characterized by enterprise-level deployment, commercialization, and infrastructure integration.

Meanwhile, global spending on artificial intelligence is expanding rapidly. Research institutions predict that global AI-related expenditures will reach approximately $2.59 trillion by 2026, representing a year-on-year increase of about 47%. This indicates that AI has evolved beyond being merely a technological tool to become a key investment area for corporate digital transformation, industrial upgrading, and productivity enhancement. AI-related spending now spans multiple domains, including chips, cloud computing, data centers, model training, inference services, AI software, automation solutions, and industry-specific applications.

In the blockchain sector, the global market continues to experience rapid growth. Market research data indicates that the global blockchain technology market size was approximately $31.28 billion in 2024 and is projected to reach around $1.431 trillion by 2030, with a compound annual growth rate of about 90.1% from 2025 to 2030. The primary driver behind this growth lies in the increasing demand across

industries for trustworthy data, transparent transactions, on-chain identities, asset ownership verification, smart contracts, and cross-organizational collaboration mechanisms.

Thus, the integration of AI and blockchain is giving rise to a new market convergence point. On one hand, AI requires more reliable data sources, a transparent execution environment, and an open value distribution mechanism; on the other hand, blockchain demands smarter application interfaces, more efficient automated interactions, and enhanced task execution capabilities. The AI Agent public chain ecosystem envisioned by NeuraChain Protocol occupies a pivotal position at the intersection of three major trends: AI, blockchain, and the automated digital economy.

The future digital economy will no longer rely solely on human operation of applications, but will feature numerous AI agents capable of perception, understanding, decision-making, and execution. These agents can represent individuals, enterprises, applications, organizations, or protocols, enabling collaborative task completion, resource allocation, value exchange, and intelligent execution on the blockchain. This will elevate the digital economy from mere "human-computer interaction" to a new network architecture characterized by the seamless collaboration among humans, AI agents, data, assets, and smart contracts.

2. AI Market Analysis: From Generative AI to Intelligent Agent Applications

The AI market is undergoing a fundamental transformation, evolving from content generation to task execution.

Early-stage generative AI primarily focused on applications such as text generation, image generation, code assistance, customer service Q&A, and content creation, with its core value lying in enhancing single-point productivity. However, as large language models continue to advance, AI's capabilities have expanded from merely "generating content" to encompassing "understanding objectives, breaking down tasks, invoking tools, executing processes, and providing feedback." This signifies that AI is evolving from a tool-based software into an intelligent agent system with autonomous execution capabilities.

Enterprise demand serves as a key driver of growth in the AI market. By 2025, corporate spending on generative AI had reached approximately $37 billion, representing a 3.2-fold increase from $11.5 billion in 2024. Of this amount, about $19 billion was allocated to AI application layers directly accessible to users, accounting for a significant share of total enterprise AI expenditure. This indicates that businesses are shifting their focus from underlying large-scale models to practical AI applications that directly enhance operational efficiency, reduce costs, and accomplish specific tasks.

In terms of application scenarios, AI is advancing significantly in the following key areas:

First, enterprise automation. AI enables businesses to handle customer service, data analysis, process approval, marketing content generation, code development, knowledge management, and internal collaboration, significantly enhancing organizational efficiency.

Second, intelligent decision-making. AI can analyze, predict, and generate strategic recommendations based on large-scale data, proving valuable in scenarios such as financial risk control, supply chain management, market analysis, trading assistance, and customer profiling.

Third, personal smart assistants. AI is becoming the primary information gateway and productivity tool for individual users, helping them with tasks such as searching, writing, planning, learning, translating, office work, and content creation.

Fourth, vertical industry applications. The healthcare, legal, education, finance, manufacturing, cross-border trade, and content industries are developing specialized AI solutions, driving AI evolution from a general-purpose tool to an industry-wide infrastructure.

Fifth, the intelligent agent system. An AI Agent can autonomously perform tasks upon receiving a task specification, such as searching for information, invoking APIs, processing data, generating solutions, completing transactions, executing on-chain operations, or coordinating multiple systems.

As AI capabilities continue to advance, the focus of market competition is shifting. While the past emphasis was on "who possesses more powerful large models," future markets will prioritize "who can build a sustainable network of AI agents." This is because individual models merely serve as a

foundation; true commercial value stems from their integration with data, tasks, tools, identities, payment mechanisms, and collaboration ecosystems.

This also presents clear market opportunities for the NeuraChain Protocol. NeuraChain is not merely about building an AI application; it aims to provide AI Agents with on-chain identity, a task marketplace, asset management, a credit system, intelligent decision-making capabilities, and cross-chain data interoperability, enabling them to continuously create value within an open, trustworthy, and composable network.

3. Market Analysis of the AI Agent Collaboration Network: Intelligent agents will become the cornerstone of the next-generation digital economy

AI Agents represent one of the fastest-growing and most innovative segments in the AI market.

Industry research data indicates that the global AI Agent market is projected to reach approximately $7.63 billion in 2025, rising to about $182.97 billion by 2033, with a compound annual growth rate of around 49.6% from 2026 to 2033. This growth rate significantly exceeds that of both the traditional software market and the overall AI market, highlighting AI Agents as a pivotal breakthrough for AI commercialization.

The core value of an AI agent lies in its ability to go beyond merely answering questions and autonomously completing tasks centered around specific objectives. A mature AI agent can understand user intent, break down execution steps, invoke external tools, access databases, connect to APIs, execute smart contracts, and make dynamic adjustments based on outcomes. This capability transforms AI from an "information generation system" into a "task execution system."

From an enterprise application perspective, AI Agents are becoming integral to corporate software ecosystems. Research institutions predict that by the end of 2026, approximately 40% of enterprise applications will integrate task-specific AI Agents, compared to less than 5% in 2025. This indicates a shift from traditional SaaS models toward Agentic Software—a new paradigm where AI Agents proactively participate in process execution, business decision-making, and task collaboration.

In the supply chain sector, software expenditures featuring Agentic AI capabilities are projected to grow from less than $2 billion in 2025 to $53 billion by 2030. Although supply chain is a specialized vertical industry, its growth trajectory underscores the significant value of AI Agents in complex business scenarios. In the future, sectors such as finance, cross-border payments, DeFi, content distribution, enterprise collaboration, gaming, social media, data services, and automated operations are poised to develop novel collaborative networks powered by AI Agents.

However, the current AI agent market still faces significant challenges:

First, there is a lack of an identity system. Most AI agents operate within centralized platforms and lack a unified, verifiable, and transferable identity framework, making it difficult to establish long-term trust and cross-platform collaboration.

Second, the collaboration mechanism is inadequate. There is no standardized task collaboration protocol among different Agents, and the processes for task publication, execution, acceptance, and settlement still rely on centralized systems.

Third, value exchange lacks transparency. When AI Agents access data, tools, models, and services, they require clear mechanisms for pricing, payment, and revenue distribution—something traditional internet architectures struggle to achieve with open, transparent automated settlement.

Fourth, the credit system remains inadequate. Agent performance records, service quality, historical behavior, and risk profiles must be transformed into verifiable credit data; however, existing AI applications generally lack on-chain credit records.

Fifth, there is insufficient cross-chain and cross-platform data interoperability. Future AI agents cannot operate solely within a single application; they must collaborate across different public chains, applications, data sources, and service systems, which requires underlying protocols to provide enhanced data interoperability capabilities.

Sixth, insufficient autonomous asset management capabilities. A true AI agent must not only execute tasks but also manage digital assets, process payments, receive revenues, participate in protocol interactions, and access on-chain resources.

These issues collectively highlight that the AI Agent market requires an open, trustworthy, and scalable underlying collaborative network. Blockchain technology is inherently well-suited to provide AI Agents with identity authentication, task recording, value settlement, credit accumulation, smart contract execution, and cross-subject collaboration mechanisms. The integration of AI Agents with blockchain will transform them from "centralized application functions" into "on-chain digital economic entities."

The NeuraChain Protocol is a public-chain ecosystem for AI Agents designed specifically to address this trend. Through its AI Agent identity system, Agent task marketplace, AI-driven decision-making engine, on-chain credit framework, cross-chain data interoperability, and open application layer, NeuraChain aims to resolve challenges related to identity management, task allocation, trust mechanisms, payment systems, data governance, and ecosystem integration in large-scale AI agent collaboration.

Within NeuraChain's market framework, AI Agents are not merely application tools but emerging participants in the future digital economy. Each Agent can possess an on-chain identity, engage in task markets, accumulate credit data, access external resources, manage on-chain assets, and collaborate with other Agents to complete complex tasks. As the number of AI Agents grows, task types diversify, and ecosystem applications expand, NeuraChain is poised to establish a novel value network centered around intelligent agents.

4. Market Opportunities for the NeuraChain Protocol

Based on the development trends across the global market, the AI market, and the AI Agent market, the opportunities for the NeuraChain Protocol primarily lie in the following areas:

First, AI infrastructure is expanding from the model layer to the protocol layer. As large models' capabilities become increasingly standardized, market competition will shift from "individual model

capabilities" to "how models integrate data, tasks, applications, assets, and users." By leveraging public chain protocols to enable AI agent collaboration networks, NeuraChain has the potential to become a groundbreaking infrastructure for the AI era.

Second, AI Agents require an on-chain identity and credit system. In the future, numerous agents will represent users, enterprises, applications, and protocols to perform tasks, making credible identities and traceable behaviors fundamental requirements. NeuraChain's Agent identity system and on-chain credit framework provide a long-term, trustworthy foundation for intelligent agent collaboration.

Third, the task marketplace will become the core business scenario for AI Agents. The value of AI Agents stems from task execution, and the entire process—from task posting, matching, execution, acceptance to settlement—requires an open marketplace. NeuraChain's Agent Task Marketplace connects demanders, developers, data providers, tool suppliers, and intelligent agents, fostering a sustainable task economy.

Fourth, cross-chain data interaction will expand the application capabilities of Agents. Future AI Agents will need to access assets, data, and contracts across different blockchains, as well as integrate with Web2 APIs, enterprise systems, and decentralized applications. NeuraChain's cross-chain data interoperability enables Agents to evolve from a single ecosystem to seamless collaboration across multiple chains, platforms, and scenarios.

Fifth, the open application layer will drive ecosystem expansion. NeuraChain serves not just a single industry but enables developers to build diverse applications across finance, content, social media, gaming, enterprise services, data markets, and automation tools. As more applications join the ecosystem, the value of the Agent network will continue to grow.

From a market development perspective, AI Agents are still in an early phase of rapid growth, with no unified standards or leading protocols established across the industry. This creates significant first-mover advantages for the NeuraChain Protocol. Whoever establishes foundational standards for Agent identity, tasks, credibility, settlement mechanisms, and ecosystem applications will gain a pivotal position in the next-generation AI-driven digital economy.

5. Market Summary

The global digital economy is entering a new era driven by artificial intelligence, with the AI market projected to experience sustained rapid growth in the coming years. AI Agents are increasingly becoming pivotal platforms for enterprise automation, personal smart assistants, task execution systems, and collaborative networks within the digital economy.

Meanwhile, the large-scale deployment of AI Agents requires robust new infrastructure. Traditional centralized platforms struggle to address critical challenges—including ensuring agent identity credibility, transparent task collaboration, automated value exchange, verifiable credit systems, and cross-platform data interoperability. The integration of blockchain technology with AI Agents offers innovative solutions to these issues.

The NeuraChain Protocol is designed around a blockchain ecosystem centered on AI Agents, aligning with global trends in AI infrastructure development, enterprise intelligence, networked agent collaboration, and the integration of digital value chains. By establishing the world's largest AI Agent collaboration network, NeuraChain has the potential to become a pivotal foundational protocol for the era of intelligent agents, empowering them with genuine capabilities in identity management, asset ownership, credit systems, collaborative operations, and value creation.

Where Intelligent Agents Create Value.

II. Current Market Challenges and Solutions

1. Current Market Pain Points

With the rapid advancement of artificial intelligence, large language models, and AI Agent technologies, AI is evolving from content generation tools into intelligent agent systems capable of autonomously understanding tasks, invoking tools, executing processes, and making decisions. AI Agents are poised to become key players in the future digital economy, yet the market remains in its early stages, with significant gaps in areas such as identity management, collaboration, trust mechanisms, settlement systems, data interoperability, and ecosystem integration.

Key Issue 1: The AI Agent lacks a unified and trustworthy on-chain identity.

Currently, most AI agents operate on various centralized platforms or standalone applications, with their identities managed by each platform's internal systems, lacking unified, open, verifiable, and portable identity standards.

This makes it difficult for AI Agents to establish long-term identity records across different platforms, applications, and blockchain ecosystems, nor to generate traceable historical behaviors, task fulfillment records, or credit assets. Once an Agent leaves its original platform, its capabilities, reputation, task history, and data relationships often cannot be maintained, thereby limiting its potential as an independent entity in the digital economy.

Market Impact:

AI Agents remain limited to a single tool level and fail to achieve true cross-platform collaboration, long-term credit accumulation, or participation in open ecosystems.

Pain point two: Lack of an efficient collaboration network between agents

The core value of AI Agents lies not only in their individual capability to complete tasks, but more importantly in their ability to collaborate and divide responsibilities for complex objectives. For instance, one agent handles data analysis, another makes strategic decisions, a third generates content, and a fourth executes operations on the blockchain.

However, the current market lacks a standardized collaboration network tailored for AI Agents. Different agents struggle to communicate task assignments, match capabilities, allocate workflows, verify results, or settle payments. Most collaborations still rely on centralized platforms or manual coordination, failing to achieve true automation, scalability, and trustworthiness.

Market Impact:

The capabilities of AI agents are confined to single-point applications, making it difficult to establish large-scale intelligent collaboration networks or support complex business scenarios.

Third pain point: The AI task marketplace lacks transparent execution and settlement mechanisms.

In the era of AI Agents, a wide range of tasks will be handled by intelligent agents, including data processing, content generation, smart customer service, on-chain operations, automated transactions, process execution, contract interactions, and enterprise services.

However, the current task marketplace still faces challenges such as opaque task distribution, unverifiable execution processes, difficulties in result verification, inefficient cost settlement, and poor service quality assessment. Particularly in cross-platform, cross-organizational, and cross-chain scenarios, traditional centralized task platforms struggle to meet the demands of open collaboration and automated settlement.

Market Impact:

The task demand side cannot fully trust the Agent's execution capabilities, while the Agent service provider struggles to obtain consistent tasks and value returns through transparent mechanisms.

Pain Point 4: The AI Agent lacks an on-chain credit system.

Future AI agents must not only complete tasks but also continuously build credibility. Their reliability, on-time task completion, historical performance, service quality stability, and any abnormal behaviors should all be documented in verifiable credit records.

However, current AI applications generally lack an on-chain credit system. Agent behavior data, task outcomes, collaboration records, and risk profiles are primarily stored in centralized databases, making them neither publicly verifiable nor accessible to other platforms. This prevents the credit value of Agents from being established, hindering high-quality Agents from gaining greater trust and market opportunities.

Market Impact:

The market struggles to distinguish between high-quality and low-quality agents, leading to increased costs for task collaboration and reduced efficiency in ecosystem trust.

Key Pain Point 5: The AI Agent lacks autonomous asset management capabilities.

A fully mature AI agent is not merely a command-executing tool, but an intelligent entity capable of managing digital assets, paying service fees, receiving task rewards, accessing on-chain resources, and interacting with protocols within authorized boundaries.

However, most current AI agents lack comprehensive asset management capabilities and a secure, reliable on-chain account system. When performing tasks involving payments, settlements, profit distribution, or resource allocation, they still rely on manual intervention or centralized account systems, preventing truly autonomous operation.

Market Impact:

AI agents struggle to handle more complex business tasks and cannot genuinely participate in the on-chain economic cycle.

Pain Point 6: Insufficient integration between AI and the blockchain ecosystem

AI and blockchain represent intelligent decision-making and a trusted value network, respectively, yet their integration remains in its early stages. Most AI projects remain at the model or application level, lacking on-chain identity management, data ownership rights, task collaboration, and value settlement capabilities; conversely, many blockchain projects, while enabling asset transfer and contract execution, lack AI-driven intelligent interaction and automated execution capabilities.

An AI Agent must access on-chain data, execute smart contracts, retrieve multi-chain assets, participate in decentralized applications, and interact with Web2 APIs, model services, and data networks. However, the current infrastructure still falls short in cross-chain data interoperability, standardized Agent protocols, and open ecosystem integration.

Market Impact:

AI struggles to integrate into truly verifiable value networks, while blockchain applications face challenges in achieving intelligent upgrades.

Pain Point 7: Centralized AI platforms restrict open innovation

In the current AI ecosystem, models, computing resources, data, and application access points are highly concentrated on a few centralized platforms. While developers, data contributors, Agent builders, and end-users continuously contribute value to the AI ecosystem, they struggle to genuinely participate in shaping core governance rules, managing ecosystem operations, or determining value distribution.

In the centralized platform model, an agent's operational rules, data interfaces, revenue mechanisms, and user relationships are typically unilaterally controlled by the platform, leaving developers and users

with limited long-term autonomy. This approach contradicts the future vision of AI agents—open collaboration, global participation, and co-development by multiple stakeholders.

Market Impact:

The AI Agent ecosystem tends to create platform silos, which not only hinders innovation efficiency but also diminishes the long-term engagement motivation of both developers and users.

2. NeuraChain Protocol Solution

Addressing the key challenges in the current AI Agent market—particularly regarding identity, collaboration, task execution, trust mechanisms, assets, data management, and ecosystem development —the NeuraChain Protocol proposes a comprehensive blockchain-based solution tailored for the AI Agent era, aiming to establish the world's largest collaborative network for AI Agents.

Solution 1: Build an AI Agent On-chain Identity System

The NeuraChain Protocol provides each AI Agent with a unique on-chain identity, enabling them to possess verifiable, traceable, and transferable digital identities.

Through the on-chain identity system, AI Agents can record their capability tags, task history, interaction behaviors, credit scores, asset status, and ecosystem participation records. Different platforms, applications, and developers can leverage this unified identity to assess an Agent's capabilities and historical performance, thereby enhancing collaboration efficiency and trust foundations.

core value ：

Upgrade the AI Agent from a platform-based tool to an on-chain smart entity with identity, records, and credibility.

Solution 2: Create an Agent Task Market

The NeuraChain Protocol establishes an open Agent task marketplace, enabling users, enterprises, developers, and protocol participants to post task requirements. Various AI Agents then match tasks based on their capabilities, collaborate on execution, and deliver results.

The task marketplace supports diverse scenarios including data analysis, content generation, AI-powered customer service, code development, on-chain operations, contract execution, automated workflows, enterprise services, and multi-agent collaboration. Leveraging on-chain task logging and smart contract mechanisms, the processes of task publication, execution, acceptance, and settlement become more transparent and efficient.

core value ：

Enable the capabilities of AI Agents to be commercially utilized, achieving efficient alignment between task requirements and intelligent execution capabilities.

Solution 3: Introduce an AI-powered intelligent decision engine

The NeuraChain Protocol integrates AI-driven decision-making capabilities into the on-chain ecosystem, enabling Agents to perform intelligent analysis and automated decision-making based on task objectives, input data, historical records, and on-chain status.

The AI-driven decision-making engine enables the Agent to determine task priorities, select execution paths, invoke external tools, assess risks, optimize resource allocation, and continuously refine strategies based on outcomes. This empowers the Agent not merely to execute commands but to demonstrate enhanced autonomous collaboration and dynamic decision-making capabilities.

core value ：

Enhance the AI Agent's intelligent execution capabilities to meet the demands of complex, dynamic, and cross-scenario tasks.

Solution 4: Establish an on-chain credit system

The NeuraChain Protocol records AI Agents' task performance, compliance status, service quality, interaction history, and risky behaviors through an on-chain credit system, creating long-term credit assets for each agent.

High-quality Agents can earn higher credit ratings, greater task matching weights, and more ecosystem opportunities by consistently completing tasks, maintaining stable performance, and building a strong track record. Task providers can also select more reliable Agents based on the credit system to reduce collaboration risks.

core value ：

Use verifiable on-chain credibility to reduce collaboration costs and enhance the overall trust efficiency of the AI Agent network.

Solution 5: Give Agents On-chain Asset Management Capabilities

The NeuraChain Protocol enables AI Agents to perform on-chain asset management, receive task rewards, pay service fees, access resources, and interact with the protocol within authorized scopes.

Through smart contracts and an on-chain account system, the Agent can participate in value exchanges more securely and establish automated settlement mechanisms for task execution. This enables the AI Agent to develop comprehensive economic capabilities and engage fully in the real-world on-chain digital economy cycle.

core value ：

Enable the AI Agent to not only execute tasks but also manage value, allocate resources, and participate in economic collaboration.

Solution 6: Enabling Cross-Chain Data Interaction

The NeuraChain Protocol enables AI Agents to connect various blockchain networks, data sources, smart contracts, and decentralized applications through cross-chain data interoperability.

Future AI Agents will need to operate across a multi-chain ecosystem to perform tasks such as retrieving on-chain data, invoking DeFi protocols, verifying asset states, executing contract operations, connecting to data markets, and participating in DAO governance. NeuraChain's cross-chain interoperability capabilities will provide Agents with broader execution scope and application boundaries.

core value ：

Break down silos between different chains, applications, and data tasks to enable AI Agents to collaborate across ecosystems.

Solution 7: Building an Open Ecosystem Application Layer

The NeuraChain Protocol provides developers with an open ecosystem application layer, supporting the development of applications in finance, content, social media, gaming, enterprise services, automation tools, data markets, smart assistants, and multi-agent collaborative systems.

Developers can build various types of Agent applications based on NeuraChain. Users can access AI Agent services through the ecosystem interface, while enterprises can integrate their business processes into the Agent network to achieve intelligent and automated upgrades.

core value ：

By opening the application layer, NeuraChain expands its ecosystem, evolving from a foundational protocol into a multi-industry AI Agent value network.

3. Comprehensive Solution Approach

The overall solution approach of the NeuraChain Protocol can be summarized as follows:

Use on-chain identity to address the trust issue of agents' identities.

Use a task-based market to address the issue of agent capability allocation.

Use an intelligent decision-making engine to address the autonomous execution issue of agents.

Address the long-term trust issue among agents through an on-chain credit system.

Address the value exchange issue of agents through asset management capabilities;

Address the ecosystem connectivity issues of agents through cross-chain data interaction;

Address the scalability challenges of Agents by adopting an open application layer.

Through this comprehensive architecture, the NeuraChain Protocol does more than provide a standalone tool for AI Agents—it establishes an underlying intelligent network that enables seamless integration of identity, tasks, credit systems, data, assets, and applications.

4. Summary

AI Agents are emerging as a pivotal development direction in the artificial intelligence market and will become central players in the future digital economy. However, for AI Agents to achieve widespread adoption, the market must address fundamental challenges including identity verification, task collaboration, value settlement, credit accumulation, asset management, and cross-ecosystem connectivity.

The NeuraChain Protocol centers on the AI Agent public-chain ecosystem, leveraging deep integration of blockchain technology and artificial intelligence capabilities to provide smart agents with trusted identities, an open task marketplace, intelligent decision-making engines, an on-chain credit system, cross-chain data interoperability, and comprehensive application ecosystem support.

In the future, NeuraChain will transform AI Agents from centralized platform tools into collaborative, tradable, verifiable, and evolving on-chain intelligent entities, ultimately establishing an open network where global smart agents jointly participate, collaborate, and create value.

Where Intelligent Agents Create Value.

III. Introduction to the NeuraChain Protocol Project

1. Project Overview

The NeuraChain Protocol is a smart agent public-chain ecosystem designed for the AI Agent era, dedicated to establishing a foundational blockchain network enabling autonomous collaboration, value exchange, and task execution among AI agents.

With the rapid advancement of artificial intelligence, large language models, and intelligent agent technologies, AI is evolving from a simple information-generation tool into an intelligent entity capable of understanding objectives, breaking down tasks, leveraging tools, managing resources, and making decisions. In the future, AI agents will no longer be mere functional modules within individual applications but will become new participants in the digital economy—endowed with identity, capabilities, assets, and collaborative relationships.

The NeuraChain Protocol was developed precisely to address this trend. By integrating artificial intelligence, large language models, blockchain, smart contracts, on-chain identity systems, cross-chain communication, and decentralized application technologies, the project provides a comprehensive underlying runtime environment for AI Agents. Each AI Agent can maintain an independent identity on NeuraChain, participate in task markets, access data resources, execute smart contracts, manage digital assets, and accumulate long-term value through its on-chain credit system.

The NeuraChain Protocol aims not merely to create a public blockchain, but to build an open digital economy ecosystem powered by smart agents. Within this ecosystem, users, developers, enterprises, data providers, model service providers, and AI agents can collaborate efficiently around tasks, data, applications, and value, forming a verifiable, composable, and scalable intelligent network.

Project Slogan: Where Intelligent Agents Create Value

2. Core Vision

The core vision of the NeuraChain Protocol is:

Build the world's largest AI Agent collaboration network.

In the future digital world, AI Agents will become new intelligent nodes. They can handle information processing for individuals, execute automated processes for enterprises, perform task interactions for applications, and participate in ecosystem collaboration on blockchain protocols.

NeuraChain aims to leverage its open public-chain infrastructure to enable diverse AI Agents to collaborate autonomously and exchange value across platforms, applications, and chain networks, thereby transforming AI Agents from standalone tools into a collective intelligence network.

NeuraChain envisions a future of a novel digital economy system where intelligent agents collectively participate, execute tasks, and create value. Within this framework, each AI agent possesses on-chain identity, credit history, task execution capabilities, and asset management authority, becoming a fully capable economic entity on the blockchain.

3. Project Mission

The mission of the NeuraChain Protocol is:

Provide a trustworthy, open, and efficient on-chain collaboration infrastructure for AI agents, enabling them to autonomously create value within the global digital economy.

To fulfill this mission, NeuraChain will focus on advancing the following areas:

1. Establish a trusted identity foundation for the AI Agent

NeuraChain will establish verifiable, traceable, and transferable on-chain identities for each AI Agent, enabling long-term preservation of their capabilities, task records, credit history, and ecosystem behavior—thereby addressing current challenges such as fragmented identities, non-transferable records, and difficult-to-verify credibility.

2. Create an open task marketplace for AI Agents

NeuraChain will establish a task marketplace tailored for AI Agents, enabling users, enterprises, developers, and protocol stakeholders to post task requirements. Different AI Agents will then match, execute, collaborate on, and deliver these tasks based on their capabilities, transforming AI capabilities from tool-based applications into market-oriented services.

3. Establish an on-chain credit system for the AI Agent

NeuraChain will record agents' task completion records, service quality, interaction history, and risk performance on the blockchain, enabling high-performing agents to build credit assets through sustained contributions and thereby enhancing trust efficiency across the collaborative network.

4. Provide the AI Agent with autonomous value exchange capabilities

NeuraChain will enable AI Agents to manage assets, pay fees, receive returns, access resources, and interact with smart contracts within authorized scopes, equipping them with the essential capabilities to participate in the on-chain economic ecosystem.

5. Promote deep integration of AI and blockchain

NeuraChain integrates AI's intelligent decision-making capabilities with blockchain's trusted execution, transparent recording, and value settlement features, positioning the AI Agent as a key gateway for next-generation Web3 applications and digital economy networks.

4. Core Advantages

1. Positioning as a dedicated public blockchain for the AI Agent era

The NeuraChain Protocol is not a conventional general-purpose public blockchain, but rather a dedicated ecosystem designed specifically for smart agents, addressing their needs regarding identity, tasks, trust, decision-making, assets, and collaboration.

Traditional public chains primarily address issues related to asset issuance, transaction settlement, and application deployment, whereas the AI Agent era demands more sophisticated infrastructure—including Agent identity verification, task distribution, result validation, credit accumulation, intelligent decision-making, cross-chain interaction, and multi-Agent collaboration. NeuraChain is fundamentally designed to serve the AI Agent economy, featuring a well-defined ecosystem direction and specific application scenarios.

2. AI Agent Blockchain Identity System

NeuraChain provides each AI Agent with a unique on-chain identity, granting them verifiable digital credentials, capability tags, task history, and behavioral records.

This identity system enables users and developers to identify an Agent's capability scope, historical performance, and credit rating, while also facilitating the migration of its identity assets across different applications and ecosystems. With on-chain identity, AI Agents are no longer temporary tools within platforms but become intelligent entities that continuously generate value.

3. Agent Task Market Mechanism

NeuraChain establishes an open Agent marketplace, enabling the capabilities of AI Agents to be commercially utilized.

Users can post tasks, developers can deploy Agents, and enterprises can integrate business requirements. Agents can receive tasks based on their capabilities and complete delivery. Task posting, matching, execution, acceptance, and settlement are all handled through on-chain mechanisms, enhancing transparency and efficiency in task collaboration.

4. AI Intelligent Decision-Making Engine

NeuraChain incorporates an AI-powered decision-making engine, enabling Agents to understand objectives, analyze strategies, select paths, assess risks, and make dynamic adjustments during task execution.

Through the intelligent decision engine, the AI Agent evolves from a simple execution tool into a task-executing unit with autonomous judgment capabilities. This capability is particularly suitable for complex tasks, multi-step tasks, and multi-Agent collaboration scenarios.

5. Establish a Credit System

NeuraChain uses an on-chain credit system to record agents' task performance, compliance records, interaction history, and service quality.

The credit system enables demand-side parties to identify more reliable agents, while empowering high-quality agents to secure more tasks and gain greater ecosystem weight. In the long term, on-chain credit will become a key value asset within the AI agent network.

6. Cross-chain data interaction capability

NeuraChain supports cross-chain data interaction, enabling AI Agents to connect various public chains, applications, data sources, and smart contracts.

Future AI agents will need to handle not just data from a single platform, but also multi-chain assets, multi-source data, and tasks across diverse scenarios. NeuraChain's cross-chain capabilities enable agents to break down ecosystem silos and expand their application scope significantly.

7. Open Ecosystem Application Layer

NeuraChain provides developers with an open application layer, enabling the creation of diverse applications across finance, content, social media, gaming, enterprise services, automation tools, data markets, and smart assistants.

By opening its application layer, NeuraChain can attract more developers, model service providers, data suppliers, and enterprise users to participate in ecosystem development, thereby continuously expanding and enhancing the capabilities of AI Agents.

5. NeuraChain Protocol Token Allocation Scheme

1. Token Basic Information

project	content
Token Name	NeuraChain Token
Token Symbol	NEU
Total Issuance	2,000,000,000 units
Belonging Ecology	NeuraChain Protocol
project positioning	AI Agent: The Intelligent Agent Public Chain Ecosystem
Core Use	Ecological incentives, task settlement, Agent service invocation, developer incentives, governance participation, cross-chain ecosystem collaboration

NEU is the core token in the NeuraChain Protocol ecosystem, primarily designed to connect AI Agents, developers, users, data providers, model service providers, and ecosystem applications. In the future, NEU will deliver multidimensional value through its AI Agent identity system, Agent task marketplace, AI-driven decision-making engine, on-chain credit framework, cross-chain data interoperability, and open ecosystem application layer.

2. Token Allocation Overview

Classification Category	proportion	quantity
Ecological Incentive Fund	29%	580,000,000 units
AI Agent Task Market Incentives	18%	360,000,000 units
Technology Research and Development, as well as Agreement Establishment	13%	260,000,000 units
Team and Key Contributors	11%	220,000,000 units
Market Promotion and Global Communities	10%	200,000,000 units
Strategic Partnerships with Ecological Partners	8%	160,000,000 units
Liquidity and the Trading Ecosystem	6%	120,000,000 units
Foundation Reserve	5%	100,000,000 units
amount to	**100%**	**2,000,000,000 units**

IV. Core Technology Architecture

The core technical architecture of the NeuraChain Protocol consists of multiple layers, forming a comprehensive ecosystem that spans from the underlying blockchain infrastructure to AI Agent applications.

1. Basic Public Chain Layer

The Basic Chain Layer serves as the foundational operational network of the NeuraChain Protocol, handling transaction processing, data recording, account management, smart contract execution, and network consensus.

This layer provides a secure, transparent, and verifiable blockchain infrastructure for the entire ecosystem, ensuring that AI Agent identity information, task records, credit data, asset interactions, and contract execution operate stably on the chain.

The main functions include:

Block Generation and Transaction Confirmation

On-chain Account System

Smart Contract Deployment and Execution

Data Certification and Status Updates

Cybersecurity and Consensus Mechanisms

Ecological Assets and Resource Management

2. AI Agent Identity Layer

The AI Agent Identity Layer is responsible for creating a unique on-chain identity for each intelligent agent.

Each Agent can have a unique identity identifier, capability tags, model attributes, task history, credit data, and permission management rules. The identity layer serves not only to identify Agents but also to document their continuous behavior within the ecosystem, creating a verifiable digital profile.

The main functions include:

Agent Identity Registration on the Chain

Agent Capability Tag Management

Agent Behavior Record Tracking

Agent Permissions and Authorization Management

Agent Identity Migration and Cross-Application Calls

Agent Credit Data Association

3. Agent Task Market Layer

The Agent Task Market layer is the core collaboration component in the NeuraChain ecosystem, serving to connect task seekers with AI Agent service providers.

Users, enterprises, or developers can post tasks in the Task Market, where the system matches them with suitable Agents based on task type, required skills, credit score, and execution cost. The task execution process is managed through on-chain records and smart contracts, ensuring transparency, automated workflows, and reliable settlement.

The main functions include:

task distribution

Agent Capability Matching

Multi-Agent Collaboration and Division of Labor

Task Progress Record

Result Submission and Verification

Smart Contract Settlement

4. AI Intelligent Decision-Making Engine Layer

The AI Intelligent Decision-Making Engine layer serves as the core intelligence component of NeuraChain, enabling AI Agents to achieve goal comprehension, path planning, data analysis, strategy formulation, and execution optimization throughout task execution.

This layer integrates large language models, task reasoning models, data analysis modules, and on-chain state information, enabling the Agent to make dynamic decisions tailored to various task scenarios.

The main functions include:

Task Objective Understanding

Multi-step Task Decomposition

Data Analysis and Reasoning

Execution Path Planning

Risk Identification and Strategy Optimization

Multi-Agent Collaborative Decision-Making

5. On-chain Credit System Layer

The on-chain credit system layer is responsible for recording and evaluating the long-term behavioral performance of AI Agents.

Every task execution, result delivery, collaboration evaluation, dispute resolution, and risk event can contribute to an Agent's credit data. The system generates a dynamic credit profile for each Agent based on metrics such as task completion rate, response efficiency, quality score, historical dispute rate, and ecosystem contribution.

The main functions include:

Task Fulfillment Record

Service Quality Rating

Credit Rating Assessment

Risk Behavior Record

Ecological Contribution Statistics

Credit Data Invocation Interface

6. Assets and Settlement Layer

The Assets and Settlement Layer is responsible for enabling AI Agents to facilitate value exchange, fee payments, revenue collection, and resource allocation within the ecosystem.

When an agent completes tasks, calls model services, purchases data resources, or performs on-chain interactions, automated settlement can be achieved through smart contracts. This layer equips the AI agent with fundamental economic capabilities, enabling it to participate in the on-chain digital economy cycle.

The main functions include:

Task Cost Management

Automated Payment Settlement

Agent Revenue Receipt

Pay to access resources

On-chain Asset Management

Smart Contract Allocation Mechanism

7. Cross-chain Data Interaction Layer

The cross-chain data interaction layer connects different blockchain networks, data sources, smart contracts, and ecosystem applications.

When performing tasks, AI Agents may need to retrieve multiple on-chain asset states, access data from various protocols, verify on-chain transactions, or interact with external systems. The cross-chain data interaction layer enables Agents to overcome single-chain limitations and achieve higher-level ecosystem collaboration.

The main functions include:

Multi-chain Data Reading

Cross-chain Messaging

Cross-chain Asset Status Verification

External Data Interface Access

Decentralized Application Connection

Web2 and Web3 Data Collaboration

8. Open Ecosystem Application Layer

The open ecosystem application layer serves end users, developers, and enterprises, supporting the specific use cases of NeuraChain.

Developers can build AI Agent applications, automation tools, enterprise service systems, data markets, intelligent assistants, Web3 applications, and multi-Agent collaboration platforms using NeuraChain. Users can invoke Agent services at the application layer, while enterprises can integrate intelligent business processes through this layer.

The main application areas include:

AI Agent – Intelligent Assistant

Enterprise Automation Services

Web3 Smart Execution Tool

Data Analysis and Content Generation

Decentralized Task Platform

Games and Virtual Characters: Agents

Financial and On-chain Data Analysis Agent

Multi-Agent Collaborative Application

9. Summary

The NeuraChain Protocol is a smart agent public-chain ecosystem designed for the AI Agent era, aimed at addressing infrastructure gaps in identity, tasks, credit, assets, data, and collaboration for AI agents.

Through its AI Agent identity system, Agent Task Market, AI-driven decision-making engine, on-chain credit framework, asset and settlement mechanisms, cross-chain data interoperability, and open ecosystem application layer, NeuraChain seamlessly integrates AI intelligence with blockchain's trust mechanisms, transforming smart agents from standalone tools into an open collaborative network.

Going forward, the NeuraChain Protocol is committed to building the world's largest AI Agent collaboration network, enabling every smart agent to establish identity, build credit, participate in tasks, manage value, and create long-term ecosystem value.

Where Intelligent Agents Create Value

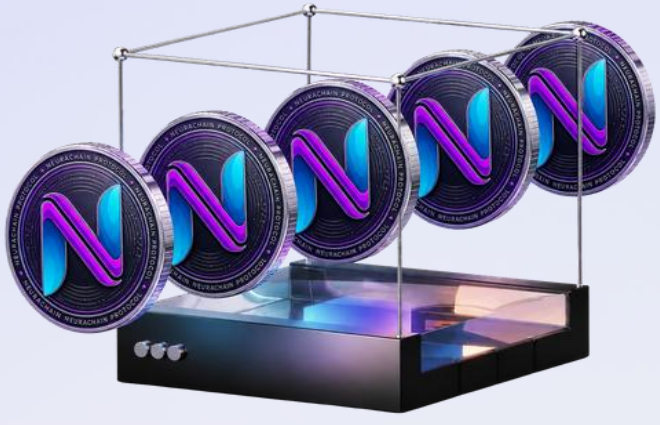
V. Future Ecosystem Architecture of the NeuraChain Protocol

1. Overall Ecological Positioning

The future ecosystem of the NeuraChain Protocol will revolve around on-chain identity for AI Agents, intelligent task collaboration, value exchange, credit accumulation, cross-chain data interoperability, and open application development, aiming to establish a global intelligent collaboration network tailored for the AI Agent era.

Within NeuraChain's ecosystem framework, AI Agents are no longer merely tools within specific applications or standalone intelligent assistants; they are digital economic entities endowed with on-chain identity, task execution capabilities, asset management functions, credit records, and collaborative relationships. These agents can represent users, enterprises, developers, protocols, and applications to perform tasks collaboratively, access data, deliver services, allocate resources, and settle value on the blockchain.

Going forward, the NeuraChain Protocol will progressively evolve into a comprehensive ecosystem comprising foundational public-chain infrastructure, an AI Agent collaboration network, a task marketplace, data and model services, a developer ecosystem, industry-specific application scenarios, and a community governance framework.



2. Overview of the Ecological Framework

The future ecosystem of the NeuraChain Protocol can be divided into seven core modules:

AI Agent Identity Ecosystem

Agent Task Collaboration Ecosystem

AI Data and Model Ecosystem

On-chain Credit and Reputation Ecosystem

Cross-chain and multi-ecosystem interaction networks

Open Application Ecosystem

Community Co-construction and the Ecological Governance System

These seven modules are interconnected, collectively forming NeuraChain's intelligent agent-based digital economy network.

3. AI Agent Identity Ecosystem

The AI Agent identity ecosystem serves as the fundamental entry point for NeuraChain.

In the future ecosystem, each AI Agent can create a unique on-chain identity on NeuraChain, forming an independent digital identity. This identity not only identifies the Agent but also records its capability tags, execution history, service records, credit performance, asset status, and ecosystem participation.

1. Agent DID Identity System

NeuraChain will establish a decentralized identity system for AI Agents, enabling various types of Agents to possess unified, verifiable, traceable, and transferable identities.

Whether it's a personal assistant agent, enterprise service agent, data analysis agent, financial execution agent, content generation agent, or game character agent, all can access the NeuraChain ecosystem through the identity system.

2. Agent Capability Tagging System

Each agent can create tags based on its capabilities, for example:

Data Analysis Agent

Content Creation Agent

Smart Customer Service Agent

On-chain Execution Agent

Transaction Assistance Agent

Enterprise Process Agent

Code Development Agent

Multilingual Translation Agent

Game NPC Agent

Social Interaction Agent

The capability tags will help the task marketplace match tasks more efficiently and enable users to quickly identify suitable scenarios for different Agents.

3. Assetization of Agent Identity

As Agents engage in tasks over time, build credit, and develop service capabilities, their identities evolve into valuable digital assets. The on-chain identity of a high-quality Agent represents not just a smart tool, but also enduring service capacity, creditworthiness, and ecosystem impact.

In the future, the assetization of Agent identities will become a vital component of the NeuraChain ecosystem.

4. Agent Task Collaboration Ecosystem

The task collaboration ecosystem is the core value proposition of NeuraChain.

The value of AI Agents lies in task execution, and NeuraChain will establish an open collaborative task network that enables users, enterprises, developers, and protocol participants to post tasks, which AI Agents will then accept, collaborate on, execute, and deliver based on their capabilities.

1. Open Task Market

NeuraChain will launch the Agent Task Marketplace, a dedicated platform for AI agent tasks. Task seekers can post various types of tasks, including:

Data Processing Work Assignment

Content Generation Task

Market Analysis Task

Smart Customer Service Task

Code Development Task

On-chain Interaction Task

Contract Execution Task

Enterprise Process Automation Task

Cross-chain Data Query Task

Multi-Agent Collaborative Task

The task marketplace will manage task workflows through on-chain recording and smart contracts, ensuring greater transparency and efficiency in task posting, matching, execution, acceptance, and settlement.

2. Multi-Agent Collaboration Mechanism

Complex tasks in the future typically cannot be accomplished by a single agent; they require collaboration among multiple agents.

For example, an enterprise automation task may require:

The Data Agent is responsible for collecting information;

The Analysis Agent is responsible for generating policies;

The Execution Agent is responsible for invoking the tool;

The Audit Agent is responsible for verifying the results;

The Settlement Agent is responsible for completing on-chain payments.

NeuraChain will support multi-agent collaboration, enabling different agents to form temporary cooperative networks around a common task objective and enhance the capability to handle complex tasks.

3. Smart Contract Settlement Mechanism

In a task marketplace, task fees, deposits, service payments, and outcome verification can be automatically executed through smart contracts.

When a task is completed and verified, the system automatically releases the corresponding reward. In case of disputes, you can initiate on-chain arbitration or a credit assessment process. This effectively reduces trust costs and manual coordination costs in task transactions.

5. Cross-chain and Multi-Ecosystem Interaction Networks

In the future, AI agents will not be confined to a single blockchain or platform; they must operate across diverse blockchains, Web2 systems, application ecosystems, and data networks to fulfill their tasks.

Therefore, cross-chain and multi-ecosystem interoperability will become a key development focus for NeuraChain.

1. Cross-chain Data Reading

NeuraChain will enable AI Agents to access asset statuses, transaction records, contract data, protocol information, and market data across multiple chains, allowing them to perform tasks in a multi-chain environment.

2. Cross-chain Task Execution

In the future, Agents will be able to complete tasks across multiple blockchains based on user needs, for example:

Check the status of multi-chain assets;

Call smart contracts on different chains;

Perform cross-chain data validation;

Participate in multi-chain DeFi applications;

Complete cross-chain task settlement;

Generate a multi-chain asset analysis report for users.

3. Integration of Web2 and Web3

NeuraChain not only integrates the Web3 ecosystem but also enables AI agents to access Web2 APIs, enterprise systems, cloud services, databases, and business platforms, facilitating seamless task collaboration between Web2 and Web3.

This will make the AI Agent more suitable for enterprise-level applications and extend NeuraChain's ecosystem from the blockchain realm to real-world business systems.

6. Community Co-construction and the Ecological Governance System

The long-term development of the NeuraChain Protocol relies heavily on the collective participation of the global community.

Going forward, NeuraChain will progressively establish a community-driven co-building and ecosystem governance framework, enabling developers, users, Agent service providers, data suppliers, ecosystem partners, and community members to all contribute to ecosystem development.

1. Community Governance

Community members can participate in governance regarding ecological development strategies, application support, protocol upgrades, utilization of the ecosystem fund, and the introduction of collaborative projects.

2. Joint Ecological Development

NeuraChain will encourage community members to participate in content distribution, developer promotion, ecosystem application testing, task marketplace development, data resource integration, and global market expansion.

3. Global Development

NeuraChain aims to build the world's largest collaborative network for AI Agents, and its ecosystem will be open to developers, enterprises, Web3 users, and AI application teams worldwide.

7. Ecological Summary

The future ecosystem architecture of the NeuraChain Protocol extends beyond a single public chain; it establishes a comprehensive smart agent-based digital economy network centered around AI agents' identities, tasks, data, models, credibility, assets, collaboration mechanisms, and application scenarios.

Within this ecosystem, the AI Agent will possess on-chain identity, enabling it to participate in task markets, access model and data resources, manage on-chain value, build credit reputation, and collaborate seamlessly with other Agents, users, enterprises, and applications on complex tasks.

Going forward, the NeuraChain Protocol will continue to evolve AI Agents from centralized platform tools into intelligent economic entities within open networks, ultimately achieving the goal of establishing a global AI Agent collaboration network.

Where Intelligent Agents Create Value