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The Agentic Implementation: Why AI is Bypassing the Front-End on SUI and Solana

As the world is becoming weaker each day at an unprecedented rate, the brain-inspired neuromorphic chips have a groundbreaking solution to performing advanced AI consuming a fraction of the energy.

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Introduction

And we live in the epoch of a radical change in the nature of the digital interaction. Generative artificial intelligence (or chatbots) that were able to write emails, write code, or answer questions became well-known in the world in recent years. That was however only the talk stage of the AI revolution. The present-day situation has altered significantly and shifted the focus towards a much more powerful paradigm: Agentic AI. As opposed to passive chatbots which just wait to be continually prompted by humans, AI agents are semi-autonomous or fully autonomous systems that have the capability to perceive their environment, reason on multi-step problems, and take actions independently across multiple software environments. They do not merely dictate solutions, they work.

“Instead of waiting for user clicks, AI on SUI and Solana acts on intent directly, turning front-end interfaces into a fading layer.”

The old-fashioned internet, which was created with graphical user interfaces (GUIs), time expirations, manual clicks, and human-speed CAPTCHAs are painfully slow and restrictive environments to such agents. The agents need not need to press buttons; they need environments that can enable them to run programmatic logic real-time. As a result, the interface comes to be the product and the agent becomes. In the instance of the fast-expanding tech ecosystem in Pakistan, there is a critical intersection point between the shift towards machine induced implementations as opposed to human induced ones. On July 30, 2025, the federal cabinet unanimously voted to adopt the National Artificial Intelligence Policy 2025, which establishes a National AI Fund (NAIF) and an ambitious goal of training one million AI professionals by 2027. Whereas the policy offers an exceptionally promising initial point in the domestic AI adoption, the local startups and developers ought to be informed that the value capture world is no more confined to the conventional web applications. Software The future of software is "headless." Independent actors are circumventing the old front-end web, and talking directly to the decentralized smart contracts to trade, manage complex financial portfolios and conduct machine to machine trade. The new star execution environments in this new age have been the high-performance blockchain like Solana and Sui, with traditional legacy systems scrambling to keep up. The agentic AI era is already with us, where we have agents operating in the economy at scale, to perform all types of activities, and their full potential opens up when they can bypass the bottlenecks of human agents in the economy to transact directly on-chain.



Technology Background: The requirement of machine-speed infrastructure

The sense in which AI agents are abandoning the traditional web interfaces in favor of blockchain networks can be found no far away. Agents have constant, high-frequency particulars: they sense their environment (such as market data), reason about what to do, act and then observe the result in order to reason about what to do next. With a simple three steps workflow, the nearly 40 seconds of idle waiting is added when an AI agent is deployed on any legacy blockchain network with block times of 12 seconds or more. In the financial markets 40 seconds is a lifetime and totally incapacitates the ability of the agent to react to the real-time situations. That is what has made Solana the de facto lab of high-frequency activity of AI agents. It is predicted that by the end of 2025, Solana will be the representative of 77 percent of all the AI agent transaction volume. Its architecture and block times of less than 400 milliseconds and very near-instant finality can permit the agents to have very tight feedback loops. A single trading agent can solo place hundreds of transactions per day on Solana on just a few cents, a working pace that would incur thousands of dollars in gas fees on older networks. Meanwhile, the Sui blockchain is in the process of positioning itself as the base layer to secure, verifiable and highly programmable agentic execution. Contrary to traditional blockchains where balances are recorded in particular accounts, Sui has an object-centric data model. This enables huge parallel processing and enables digital resources to possess programmable and complex behaviors directly embedded into them. Another massive stimulus to Sui prominence in the agentic space, was in late September 2025, when Google Cloud announced Sui as one of its first partners in its new Agentic Payments Protocol (AP2). It is a new system, which has been designed keeping in view the purpose of using AI agents to perform their financial transactions, paywalls, and automated purchases on their behalf in a seamless manner, which is more or less a combination of real-world payment rails with autonomous smart contracts. This coalition institutionalized Sui as an institutional quality infrastructure on which the agents can safely operate without having the human hand constantly at their disposal.

Key Findings & Impact

Transition to Intent-Centric Execution Models: The fast adoption of AI agents on-chain has brought forward important lessons about infrastructure security, programming languages, and the emergence of entirely new economic models. One of the most significant outcomes is the rapid transition toward intent-centric architectures. In the past, blockchain interaction required imperative, stepwise construction of transactions (e.g., visiting a DEX, approving a token, setting slippage, and executing a swap). Today, a user simply expresses what they want—this is known as an intent. For example: “*Swap 1 ETH to USDC only when market volatility drops below a defined threshold.*” The AI agent acts as a “solver,” monitoring the market, identifying optimal liquidity paths, and executing the transaction at the right moment when conditions are met. This eliminates the friction of manual UI-based interaction entirely.

Emergence of Autonomous Agent-to-Agent Economies: *We are also witnessing the early stages of genuine agent-to-agent transactions. In this emerging headless economy, autonomous agents transact directly with one another without human involvement. For instance, an AI data-scraping agent may charge a micro-transaction in stablecoins to an AI financial-analysis agent in exchange for a specific dataset. This creates a new class of machine-native economic activity operating independently of traditional user interfaces.*

Security Challenges and the Role of Safer Programming Frameworks: However, delegating financial execution to autonomous software introduces significant security risks. AI agents with direct wallet access—especially those embedding private keys—present major vulnerabilities. A notable example occurred in 2024, when the Banana Gun Telegram bot was exploited due to a flaw in its oracle message logic, allowing attackers to drain approximately \$3 million from user wallets. In this context, the choice of blockchain programming language



becomes critical. The Move programming language, adopted by networks like Sui, provides stronger safety guarantees compared to traditional languages. Conventional vulnerability models designed around Solidity may struggle in an environment where AI agents autonomously generate and audit code. Move’s resource-oriented design, linear typing, and strict ownership model eliminate many common vulnerabilities, making it a more secure foundation for AI-driven execution.

Metric/ Feature	Solana Ecosystem	Sui Ecosystem
Primary Advantage	Sub-400ms block times, negligible transaction costs	Object-centric architecture, deep programmability
Agentic Suitability	High-frequency trading, tight observe-reason-act loops	Verifiable constraints, secure asset ownership via Move
Security Framework	High throughput, relies on rigorous external auditing	Native safety via Move language's linear typing
Recent Catalysts	Captured 77% of AI agent transaction volume (Late 2025)	Launch partner for Google Cloud's Agentic Payments Protocol (AP2)

What's Next?

The introduction of intent-based architectures, together with autonomous agents is a paradigm shift. We are taking a clear cut towards an internet of interaction, to an internet of execution. Together with the development of secure key management, this infrastructure will finally allow agents to work with meaningful autonomy, but still be bound to stringent user consent policies.

In the situation of Pakistan, they have no option except to follow this trend as otherwise, the IT export business in Pakistan will die. Though the National AI Policy 2025 is a good step towards the right direction in terms of human capital, policy analysts also note that it does not as yet have a national policy on data governance, and enforceable algorithmic safeguards. Should Pakistani developers be tasked to develop AI agents that will be undertaking autonomous financial execution, they must have strong domestic regulations that will in turn be in line with international compliance regulations.

The educational emphasis needs to shift in order to fully take advantage of the huge opportunity offered by enterprise AI agents. The local university curriculum and Tech bootcamps should not terminate on the students on how to prompt the generative language models. More importantly, secure and intent-driven smart contracts, built with systems-level languages, such as Rust and Move, are much more valuable.



The internet is getting blurred on its front-end. The manual interface that we have long been familiar with since decades are being replaced with the invisible and highly productive agentic pipelines. The ecosystems enabling the quickest, most secure and most programmable layers of execution will take on the future of worldwide business.

About the Author

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