



UBIQUITY DAO

THE METAVERSE BANK

UbiquityOS

...

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Disclaimer	4
Abstract	5
Background	5
Mission	6
Project Overview	7
Token	7
Legal	7
Financials	7
Roadmap	7
Partnerships	7
Advisors	7
References	8
Executive Summary	8
Ecosystem	9
Financial Products	9
Ubiquity Dollar	9
Ubiquity Cards	9
Ubiquity Wallet	10
Productivity	10
Ubiquity Superintendent (codenamed: UbiquiBot/the Kernel)	10
Ubiquity Open Work Directory	11
Ubiquity Rewards	11
Miscellaneous	12
Ubiquity Reward Audits	12
Ubiquity Onboarding	13
Competitors	13
Fetch.ai	13
Permit Generation	13
Assistive Pricing	14
Conversation Rewards	15
Focus on developer tooling	16
Olas (Autonolas, Valory)	16
Delesyium	17
Morpheus	17

Investors	17
Interested Partners	18

Disclaimer

Not yet written

Abstract

UbiquityOS is an innovative blockchain and AI-powered ecosystem designed to enhance the operational efficiencies of DAOs and distributed organizations. At its core, UbiquityOS facilitates the creation, management, and optimization of software development workflows through AI-driven automation, aiming to streamline development processes and foster collaboration. The platform introduces the "DevPool" for developer tooling on GitHub, leveraging intelligent AI agents capable of transacting with ERC-20 and ERC-721 tokens to incentivize contributions.

A key feature of UbiquityOS is the integration of the Ubiquity Dollar stablecoin, utilizing ERC-2535 for protocol upgradability and supporting LUSD as collateral. The ecosystem is enriched with financial products, productivity tools, and a marketplace connecting partners, contributors, and plugin developers. Key components include Ubiquity Cards for real-world spending, Ubiquity Wallet for seamless integrations, and the Ubiquity Superintendent AI for monitoring and responding to work related (GitHub) activities.

Additionally, Ubiquity DAO emphasizes a decentralized approach, with a focus on developer tooling, and stands out through its fair-launch strategy and fully open sourced, community-driven development. With modest seed funding and a strategy focused on dynamic contributor compensation, UbiquityOS is poised to revolutionize software development and collaboration within DAOs and beyond.

Background

The evolution of software development and project management within decentralized autonomous organizations (DAOs) and other distributed systems has been rapid and transformative. Historically, the software development industry has struggled with issues such as inefficient workflows, lack of transparency in collaboration, and difficulty in managing decentralized contributors. The emergence of blockchain technology promised to address some of these challenges by offering decentralization, transparency, and secure value transfer mechanisms. However, the integration of blockchain with software development workflows remained complex and underexploited, particularly in incentivizing and managing contributions in a transparent and efficient manner.

The advent of DAOs introduced a new paradigm for organizational management and decision-making. DAOs operate on principles of collective decision-making with decentralized governance, leveraging blockchain to enforce rules and execute decisions. While DAOs revolutionized organizational structures, they also underscored the need for more sophisticated tools to manage decentralized projects effectively. Specifically, the industry faced challenges in task allocation, contribution tracking, and carefully calibrated incentives, which hindered operational efficiency and scalability.

Recognizing these challenges, UbiquityOS emerges as a solution aimed at bridging the gap between blockchain's potential and the operational needs of DAOs and distributed organizations. UbiquityOS is designed as a blockchain and AI-powered ecosystem that enhances the operational efficiencies of these entities. By integrating intelligent AI agents capable of transacting with ERC-20 and ERC-721 tokens, UbiquityOS introduces a novel approach to

incentivizing both human and AI contributions, thereby streamlining the development process and enhancing productivity.

The introduction of the Ubiquity Dollar, a stablecoin at the heart of the UbiquityOS ecosystem, addresses the need for a reliable medium of exchange that supports the decentralized and transparent nature of DAOs. Moreover, the platform's focus on developer tooling, particularly with its "DevPool" for GitHub, showcases a tailored approach to solving specific industry problems related to software development workflows.

In summary, UbiquityOS is not just a response to the inefficiencies and challenges faced by DAOs and distributed organizations in managing software development projects. It represents a forward-looking solution that leverages the latest in blockchain and AI technologies to redefine what is possible in terms of operational efficiency, collaboration, and value creation in distributed organizations.

Mission

Our mission is to establish Ubiquity DAO as the central financial institution of the DAO work economy, pioneering the introduction of a stable and reliable currency, the Ubiquity Dollar. This flagship product is designed not only to serve as the backbone of the DAO economy but also to extend its utility beyond the traditional confines of decentralized finance (DeFi) into more integrated and practical applications across various platforms and products. Our aim is to facilitate a seamless economic experience that enhances the DeFi ecosystem's accessibility, security, and usability, thereby propelling the Ubiquity Dollar to become the currency of choice for an expanding array of digital interactions.

With a keen focus on innovation and community empowerment, Ubiquity Research spearheads our efforts to develop open-source tools and resources tailored for the DAO community. These initiatives are crafted to streamline organizational operations and foster a thriving ecosystem for DAOs to flourish. Our philosophy underscores the importance of transparency and community involvement in shaping the trajectory of our product offerings, ensuring they evolve in harmony with the needs and aspirations of our partners and users.

The DevPool epitomizes our mission by harnessing the synergy between the developer community, artificial intelligence, GitHub, and cryptocurrency payments to accelerate the development lifecycle. For project and repository managers, DevPool is a boon that alleviates the burden of task management, channeling the right incentives to developers for delivering superior code swiftly. Developers, in turn, are rewarded for their contributions to projects that resonate with their passions, marking a step forward in supporting and valuing open-source development. Furthermore, DAOs benefit immensely from DevPool's AI integration with GitHub, which automates task management and ensures the most suitable developers are matched with tasks, thereby enhancing efficiency and productivity across the board.

Ubiquity DAO's mission is to pave the way for sustainable, accessible, and innovative financial solutions that empower the next billion users to navigate and thrive in the DeFi space. Through our concerted efforts in product design, development, and community engagement, we are dedicated to achieving a future where economic functionality is seamlessly integrated into the fabric of the digital world, making the DAO economy more robust, versatile, and user-friendly.

Project Overview

Technical details of the project and product(s).

Description of the rationale behind blockchain implementation.

Analysis of competitors in the industry.

Token

Technical details of the token, such as tokens' nature and function within the ecosystem, token distribution plan, amount in circulation, etc.

Legal

If applicable, descriptions on regulatory hurdles that need to be considered and licenses that need to be obtained.

Financials

Breakdown of all financial information such as CAPEX & OPEX budgets, cash flow projections, and allocation of proceeds.

Roadmap

Timeline of events such as project milestones.

Partnerships

If applicable, list of partnering companies and their role in the project.

Advisors

Description of why this is the perfect team for this project and its future success

Includes a photo of the individual, role in the project, and a brief description of professional history.

References

Citations of information obtained from research.

Executive Summary

UbiquityOS is a cutting-edge, blockchain and AI powered ecosystem of intelligent agents with the speciality of maximizing operational efficiencies of DAOs and other distributed organizations.

The first niche we are targeting is developer tooling on GitHub. It is codenamed the “DevPool.”

These AI agents have the ability to transact value using any ERC-20 (or ERC-721 NFT) compliant token, to offer direct financial incentives to contributors, human or not, streamlining the development process and enhancing productivity.

We provide an innovative and decentralized infrastructure where developers can create, manage, and optimize their software development workflows, leveraging AI-driven technologies to automate tasks, improve code quality, and facilitate collaboration at scale.

UbiquityOS offers first-class support of the [Ubiquity Dollar](#) for payment settlement within the ecosystem, rewarding contributions and facilitating discounted access to premium agents and features.

The Ubiquity Dollar stablecoin is similar to [FRAX](#) in economics, but features an [ERC-2535: Diamond Multi-Facet Proxy](#) core for optimal protocol upgradability. At launch it only supports [Liquidity's LUSD](#) as collateral to maximize censorship resistance.

With plugins that span across the software development lifecycle, the UbiquityOS ecosystem is versatile, supporting everything from code analysis and bug detection to automated pull request reviews and integration testing. We enable secure, efficient access to code repositories and support the development of decentralized plugins using our SDK that can streamline project management and collaboration efforts.

Built on modern, scalable technology, UbiquityOS emphasizes interoperability, allowing for seamless integration with external tools and services. UbiquityOS AI components, tailored for developer needs, address complex challenges by combining the precision of machine learning with the flexibility of AI to offer solutions that surpass traditional automation tools.

UbiquityOS is recognized for its potential to revolutionize how teams collaborate online, offering tools that codify incentives, optimize workflows, enhance code quality, and automate mundane tasks, thereby freeing contributors to focus on innovation and creativity. We are committed to democratizing access to AI technology for developers, changing the way software is built, and making development more efficient and accessible to all.

UbiquityOS is a three-sided marketplace of partners organizations creating tasks, contributors completing the tasks, and plugin developers automating assistance in completing those tasks.

Ecosystem

Financial Products

Ubiquity Dollar



The Ubiquity Dollar is the core primitive we are building our ecosystem around. This is our first protocol since the inception of Ubiquity DAO in 2020. We are redeploying a next generation version of the stablecoin protocol in April 2024.

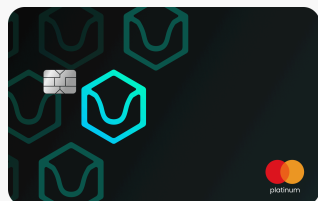
The Dollar is a key tool to UbiquityOS's profitability because it allows us to generate yield on idle capital in our network. We also plan to support native integrations within our planned wallet and payment cards to provide a state-of-the-art user experience for paying and earning in the metaverse.

An example for how to profit off of idle capital:

1. Partner obtains and deposits 10,000 Ubiquity Dollars in a bot controlled wallet. This means that ~9,500 LUSD have been deposited at some point in our minting contract (5% is in the form of our governance tokens during our network bootstrapping period.)
2. As the partner pays out contributors, they receive their pieces of Ubiquity Dollars and cash out either by selling for another token on a dex, or topping up their payment cards for real world spending.
3. All the while we are able to utilize the underlying LUSD in similar fashion to [FRAX's AMOs](#).

A stablecoin in a vacuum is not very useful or interesting. This is why deep integration into UbiquityOS is essential for its growth.

Ubiquity Cards



First launching as prepaid Mastercard and Visa cards, this allows users to conveniently spend their earnings from UbiquityOS in the real world. The primary distribution method is via virtual cards imported to Apple/Android/Samsung Pay in mobile devices. Prepaid cards do not require KYC (up to \$1000 USD) making onboarding more convenient for new users.

This can be especially appealing to the anonymous and privacy focused culture that is prominent in the crypto industry. It is also immediately useful for those without banking services around the world, truly banking the unbanked: one of the original visions of Bitcoin.

After our fundraising we aim to launch Ubiquity Debit cards which are capable of automatic balance top ups from UbiquityOS earnings. This requires elevated regulatory compliance and operating costs. We also have done plenty of research around creating a lending market (e.g. Aave fork) to enable credit for real world spending based off of our Ubiquity governance token and Ubiquity Dollars.

Ubiquity Wallet

The Ubiquity Wallet allows for deep vertical integration with our payments infrastructure, consisting of interactions between UbiquityOS, the Ubiquity Dollar, and payment cards. A browser extension and native iOS/Android clients are in early research phases as of March 2024.

The Wallet's emphasis is on security, bleeding fast UI/UX, native integrations with our payments infrastructure, native integrations with our UbiquityOS infrastructure (e.g. displaying live estimated conversation reward payout amounts, overlaying user XP stats on the GitHub UI) and account abstraction technologies. A public beta of the browser extension is expected to be released by the end of 2024.

Productivity

Ubiquity Superintendent (codenamed: UbiquiBot/the Kernel)

This agile AI agent monitors, learns from, and instantly responds to all work related events. Starting with native support for any GitHub related events (e.g. issues being closed as complete, pull requests being opened, new comments) this interface allows UbiquityOS to deeply understand and respond to activity on the atomic level across all work projects within our network.

The Superintendent's capabilities are modular with a plugin-based architecture. It comes preloaded with default settings, and allows for fully configurable behavior per partners' GitHub repositories or entire GitHub organization.

The Superintendent is designed to be extensible and to handle any type of incoming webhook event, however our first focus is to support 100% of GitHub events first. This plugins-based architecture allows for integrations across any platforms that support external APIs. We have immediate plans to enable native support across all of Telegram's webhooks for a new and more intimate way to interact with UbiquityOS, with many more planned integrations.

The Superintendent has first-class support for natively running plugins hosted on code repositories directly on GitHub, leveraging GitHub Actions runners. This makes it significantly faster and more convenient for plugin developers to provide value across our network without having to worry about hosting them on outside server infrastructure. We're especially excited for this capability because GitHub Actions offers essentially unlimited compute, for up to six hours per job, for free, on plugin developers' public repositories. This will make running the UbiquityOS infrastructure essentially free at scale.

We are actively doing research on a developer friendly value-capture-mechanism in our plugin SDK. This intends to abstract the mechanics of capturing a percentage (or flat subscription fee) from payment transactions their plugin facilitates.

Ubiquity Open Work Directory

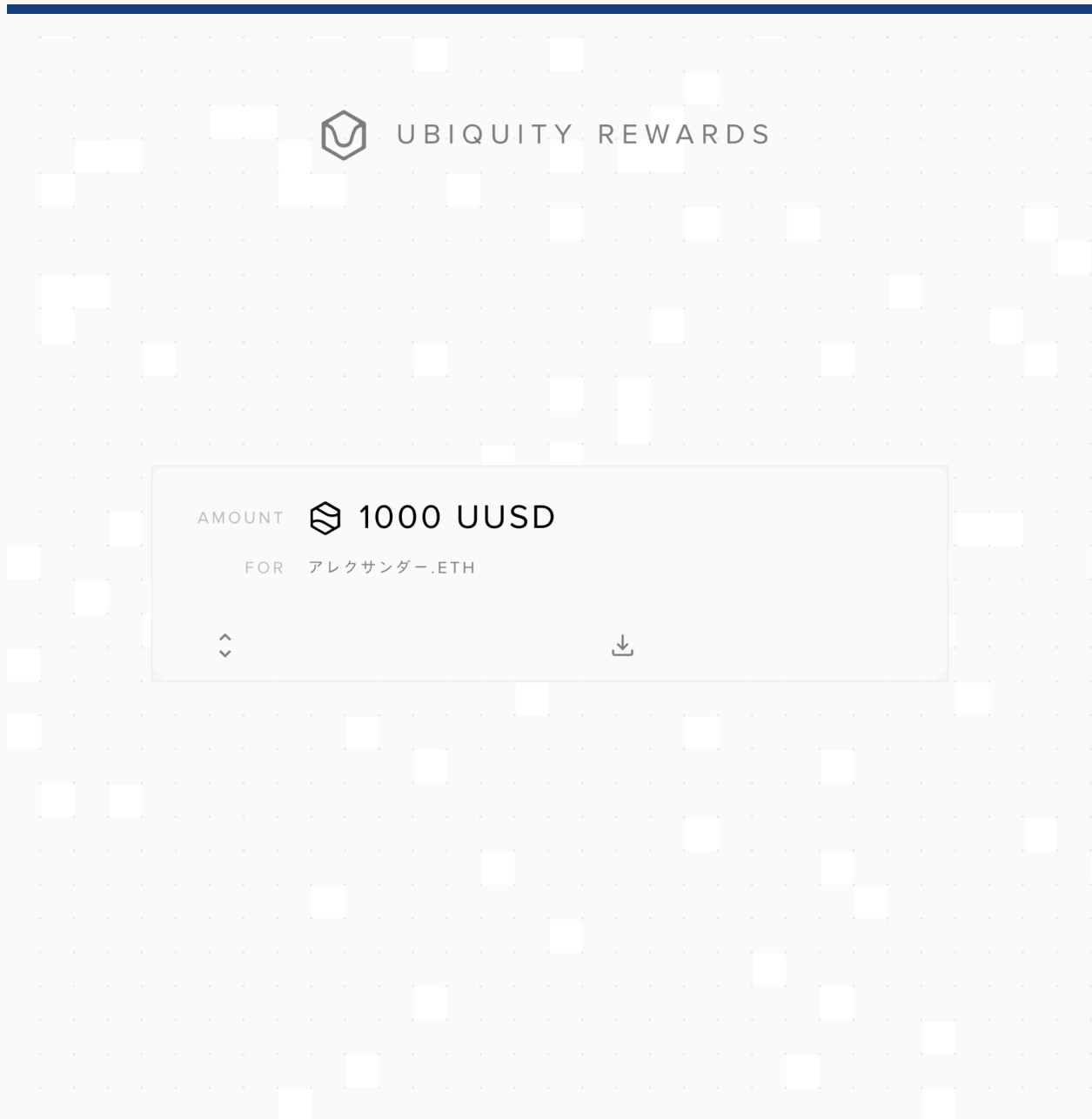
work.ubq.fi aggregates all of the available tasks across all of our partners in our network. This is especially valuable as a top-of-funnel for recruiting talent for any partner projects.

When a partner uses UbiquityOS, they have the ability to opt-in all tasks within their projects. When a task has a price set, it will automatically sync to the Open Work Directory. Developers can easily sort for tasks of interest using this tool, and start adding value to our partners immediately.

In the future we plan to decentralize the directory. For now, the code is open sourced and can be run by anybody.

Detailed instructions on how to contribute as a developer is on our website at <https://dao.ubq.fi/devpool-flow>

Ubiquity Rewards



Ubiquity Rewards (aka pay.ubq.fi) (view a [test claim link](#)) allows contributors to collect payments for their contributions within our network. This currently supports receiving ERC20-compliant token rewards, as well as NFT rewards directly to their personal crypto wallets. In the near future, we are natively integrating Apple/Android/Samsung Pay compliant virtual cards, offering a neobank-like experience featuring the user's transaction histories and balances.

Miscellaneous

Ubiquity Reward Audits

Ubiquity Reward Audits (aka [audit.ubq.fi](#)) is a tool early in development that leverages our vast work analytics infrastructure across our network. It allows our partners to stay on top of payment outflows across all of their projects.

Ubiquity Audits makes it clear to see **who** received **how much** for **what work** across **any time interval**, in any **task** (GitHub Issue) **project** (GitHub Repository) or **organization** (GitHub Organization.)

Ubiquity Onboarding

Ubiquity Onboarding (aka [onboard.ubq.fi](#)) is early in development that allows partners to seamlessly onboard our system. This allows them to sign in with GitHub, and grant access to the Superintendent with recommended default configurations, with a couple of clicks.

Coupled with non-invasive default settings, we are designing this experience to be as seamless as possible for new projects to enable UbiquityOS for their DAOs.

Competitors

Fetch.ai

Raised: \$75.9M USD

<https://fetch.ai/integrations> is Superintendent plugins, rebranded. However, a key difference is that they only show simple examples that do not provide real world business value. Examples: “[Car Parking from Geoapify integration](#)” “[Openchargemap integration](#)” and “[Fetch Holiday](#)”.

Our plugins 1. Have native integrations to directly respond to events that occur on GitHub (i.e. within a work environment) and 2. Streamline our team management now. Some notable plugins we use now are “assistive pricing”, “conversation rewards”, and “permit generation.”

Python vs TypeScript:

All their plugins are implemented in Python. Although Python may have appeal for data scientists; professional application developers generally use languages like TypeScript to build software intended for end users. 100% of our current software is implemented in TypeScript, but technically any language can be used within the runtime environments we use.

[Permit Generation](#)

AMOUNT

100 WXDAI

FOR

UBIQUITYDAO.ETH

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In order to provide tangible authority to the Superintendent within any organization, it must have the ability to transfer value. This module enables support for agents to generate off-chain cryptographic signatures (payment permits) so that contributors can claim them with our Ubiquity Rewards app (pay.ubq.fi) and withdraw up to the authorized amount from the agent controlled wallet of the project it is managing.

This is all handled in a fully decentralized manner, in alignment with the Ethereum ethos. This system enables support for separately owned wallets of contributors, and partners, with payment permits posted directly on GitHub comments. Permits can be saved anywhere, including via a direct transmission to a contributor's email inbox, Telegram direct messages etc.

A benefit of permit generation is that the contributors pay the gas fees for claims, instead of the agents or the partners. For convenience, the plugin is configurable to immediately transfer the amount (and pay the gas fee) to the contributor as well.

This module also allows contributors to associate the payment wallet address to their GitHub username simply by commenting `/wallet 0x0000...0000` anywhere the Superintendent has access. For now this is generally used on GitHub issues or pull requests for first-time contributors as they only need to register their wallet once.

In a near future version, we plan to keep track of experience points “XP” which corresponds to every Ubiquity Dollar earned by contributors across three categories: repository, organization, and global. This will allow for fine-grained gating of “tasks” based on XP. For example, if a contributor is of X level within this specific repository, they are able to work on high priority tasks. Or, the contributor must have more than 0 XP globally in order to take on any tasks within the organization. This will also enable us to more finely automate and incentivize behaviors like disqualification of pull request reviews if their XP gets deducted too much for poor performance.

[Assistive Pricing](#)

pavlovcik

added

Time: <1 Week

Priority: 4 (Urgent)

labels 2 days ago

ubiquibot

bot

added the

Price: 800 USD

label 2 days ago

Assistive pricing is essential for product owners and other managers to instantly set a price for any task. In the current implementation, it is a simple, but fully configurable lookup table between the **Priority** level and the **Time** estimate. It also allows for projects to set a “base rate” so that specific projects can have a configurable multiplier to reflect its importance to the organization’s overarching strategic objectives.

When creating a new GitHub issue (task) the team only needs to select labels that represent the **Priority** and **Time** estimate to complete the task, and the bot will automatically set the price directly on the GitHub issue for any contributor to see. Issue authors have the ability to price tasks in seconds.

This currently supports fine-grained access control within your organization to set specific labels. For example, a non-technical project manager may only have authority to set a priority level, while trusted technical developers can set the time level. Or if a specific deal is made, an authorized team member can directly set a price label without the assistive pricing.

In the next version, leveraging text embeddings and advanced machine learning algorithms, the system will be able to suggest time estimates and priorities for any new task, based on historical data in the network of similar tasks with real world data. This enables a hands-off future for anybody to define proposals and let the rest be handled automatically via finely tuned contributor incentives and payment automation, pending the approval of authorized individuals.

In addition to gaining insights, our system will recommend the most suitable developers from our network to complete a task, prioritizing those whose previous work most closely matches the task description.

When a developer has successfully completed a similar task, they become eligible as a candidate. The high likelihood of accepting the offer is due to their familiarity with the task and the potential for earning easy money. This feature is expected to revolutionize developer recruitment.

We can algorithmically rank them in order of eligibility considering their experience level with the system (we keep an XP score) time-to-completion (from when they started the previous similar task to when it was closed as completed) and recency of completion.

Conversation Rewards

Contributors are rewarded for adding comments that help complete tasks. For example, by proposing enhancements, bug fixes, or new features (all can be handled by filing new GitHub issues) helping review other contributor’s work (pull request reviews) or providing research that helps others complete the task with increased accuracy (normal comments.)

The Superintendent has the capability to evaluate all contributor’s comments quantitatively and qualitatively. Powered by various LLMs with a proprietary (but fully configurable) algorithm, the Superintendent is able to provide credit for detailed input that provides value to solving the task at hand.

ubiquibot bot commented last month

...

▶ [89.2 WXDAl] @pavlovck

▼ [46.6 WXDAl] @FernandVEYRIER

Contributions Overview

View	Contribution	Count	Reward
Issue	Task	1	37.5
Issue	Comment	7	0
Review	Comment	2	9.1

Conversation Incentives

Comment	Formatting	Relevance	Reward
@rndqu Just wanted to clarify on this task to understand better...	▶ -	-	-
@pavlovck I am pretty familiar with Supabase, but I think this ...	▶ -	-	-
After digging into this for a while, got a few questions: The...	▶ -	-	-
Righty, but how do I use these IDs to look the issues / users up...	▶ -	-	-
Indeed would be very helpful. Is it not usable right now?	-	-	-
> > /assign > > Try using /start Thank you it worked. Any ...	-	-	-
@pavlovck This might have broken the process of Ubiquibot, whic...	-	-	-
@pavlovck All good, it is ready now. This issue is extremely pa...	7.8	0.62	7.8
> @FernandVEYRIER some merge conflicts for you here. Will fix...	1.3	0.31	1.3

▶ [0.6 WXDAl] @devpanther

▶ [1 WXDAl] @aditygr2

▶ [53.4 WXDAl] @rndqu

▶ [3.6 WXDAl] @CrustallRundrops

🌐

This scoring shows customizations around disabling rewards for follow up questions of an assignee on a task (too easy to game this by asking useless questions.) We also normally multiply the “formatting score” with the “relevance” or how on-topic it is, but in the example screenshot we configured the relevance to be worth 1 for this assignee.

Focus on developer tooling

Because we are specialized in DAO operations management, with an initial focus in software development, it is far easier to provide more value within the context of software development compared to fetch.ai. Fetch aims to make integrations for everything, which means they are spreading themselves thinner than us.

Another benefit is that our pool of tasks currently incentivizes human agents. This is great because there’s plenty of capable human workers ready to deliver work right now (including employees at our partner’s organizations.) In the near future, we can easily incorporate AI agents for work completion in our exact same tasks architecture via plugins.

Olas (Autonolas, Valory)

Raised: \$4M USD

Delesyium

Raised: \$14M USD

Ex raventech, raised a ton of rounds of capital (three series A rounds?) since 2019.

Morpheus

The primary purpose of this network is to create “autonomous economic agents” which is simple to do with our plugin-based architecture. Our Superintendent AI manager already has support for automated permit generation and token transfers for work contributions in our network.

Like Morpheus, Ubiquity differentiates itself from the others with a decentralized and fair-launch approach (there was no pre-mine or ICO).

Fair launches attract prominent supporters, including Eric Voorhees, for Morpheus.

Investors

We raised a \$2M USD seed, led by Animoca Ventures, in May 2022.



Not featured above: [DCF God](#), [Grills](#), [Coud](#)

As of 26 March 2024 we have \$2M USD in our treasury due to prudent treasury management and efficient operational expenditures due to using UbiquityOS. Due to the incredible flexibility of codifying incentives, we plan to move our entire team off of base salaries and fully onto the UbiquityOS reward system for dynamic contributor compensation based purely on productive work output, down to the word-in-comment level.

Real time adjustments to compensation managed by intelligent autonomous agents allows for top talent to be rewarded generously, and low performing talent to self select themselves out with limited compensation and human management overhead.

Interested Partners

To ensure a stellar partner experience, the Ubiquity core team has decided to put onboarding efforts on hold until after September 1, 2024, when Ubiquity will transition out of "fundraising mode." This decision was made after observing warm interest from notable DAOs. Our team believes that by focusing all their efforts on onboarding new partners, we can deliver the best possible experience, which will minimize churn and motivate them to develop their own agents to improve the network, and their own operational efficiencies.