



# Refereum

Cut out marketing middleman by directly rewarding influencers and gamers to promote and play video games.

Integrated with:



unity

v1.4

team@refereum.com

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# Abstract

Over \$170 billion has been spent on digital advertising annually in recent years [1], yet the industry is plagued with legacy inefficiencies. At \$108 billion annually, video games are one of the largest and most profitable segments of the entertainment industry, surpassing the US film industry [2]. Unfortunately, recent years show that game budgets have shifted from content creation to skyrocketing marketing costs enforced by the current monopoly on advertising avenues. While game streamers and content creators have amassed the most subscribers of anyone on the internet [3], they remain frustrated by the limited opportunities to monetize their followings [4]; their fate is decided by centralized platforms. A generation's dream of being paid to play video games is locked behind an industry status quo enforced by monopolizing marketing corporations.

The Refereum (RFR) utility token is a decentralized referral marketing and cash reward platform that solves these problems.

Refereum's open-market approach removes the legal costs of individualized marketing deals while making digital advertising middlemen irrelevant. Instead of letting marketing budgets go to another advertising conglomerate, Refereum funds engagement for cash awards in the gaming community and enables superior acquisition of new players. **Refereum directly connects these groups, allowing gamers to make money sharing and playing video games, influencers to effectively monetize their followings, and studios to maximize the efficiency of marketing spend and player engagement.**

Refereum is backed by a veteran game industry team with leadership experience from Electronic Arts, Zynga, Google, and other prominent gaming and platform roles. The smart contracts have been written by world-renowned white hat cryptography and cryptocurrency experts who have served from Tether to Polybius, and other similar high-profile initiatives. Refereum is advised by Twitch, the world's largest gaming influencer platform, and Unity, the most widely used game engine in the industry.

# Marketing Challenges

The largest inefficiency in the \$108 billion dollar game industry today is the cost of customer acquisition, and this cost is growing at 113% a year [5]. Video game consumers are exploding in number, surpassing 2.2 billion people [6], yet reaching this vast and growing demographic of players grows in price because video game studios must dedicate a rising ratio of spend to conventional advertising channels. Mobile and desktop games are seeing marketing costs grow from less than a dollar to more than \$15 to acquire a single new player [7], while game creators of any success level still have to rely on sponsored content via social media. While spend on ads is likely to exceed \$37 billion in 2017 [8], the market is becoming saturated and losing effectiveness with most technically savvy consumers [9]. Finding specific types of effective marketing channels continues to increase in difficulty, especially if the addressable market is the entire digital world. There are many ad networks with low quality audiences and sub-optimal tools that game studios are forced to invest a lot of time, energy and resources to find relevant players. On top of that, it's often hard to track ROI and conversions because there is no direct link between players and the particular ad network. Within existing channels, targeting specific types of players can be exasperating: developers currently have **no choice but to pay companies such as Google and Facebook to create "buzz," and they have no other scalable solutions to directly involve or engage players** through marketing efforts. This high price for customer acquisition is then passed to customers through aggressive monetization tactics, perpetuating the problem.

# Influencer Challenges

## **Twitch and YouTube video game influencers entertain the largest audiences in the world**

[3], with games like Dota 2 surpassing 32 million viewers [11] compared to just 20 million for Sunday Night Football [10]. As viewers shift away from mainstream television towards YouTube, the content they watch also changes. Middleman companies for games are popping up to take advantage of developers and content creators, knowing that 84% of marketers are searching for this type of influencer marketing [13]. Gamers making videos and streaming new games have become a billion-dollar industry in themselves. By sharing their gameplay and interacting with fans in real time, Twitch and YouTube influencers draw massive attention to the games they play; attracting these influencers has become a critical component of any successful marketing strategy in today's market.

In the current ecosystem, these influencers are unable to fulfill the monetary potential of their fanbase [4]. Influencers create loyal and engaged audiences from personal, interactive, and real-time relationships around specific game products. A new generation dreams of becoming full-time streamers, but the barriers to entry are high. Those who overcome them face the constant challenge of sustaining their income from their passion. While some very elite influencers profit by licensing out their brands, the vast majority are limited in how to generate income from such passion. Current methods have fallen prey to numerous examples of large centralized platforms changing policies to the detriment of the creator: YouTube's most subscribed influencer, PewDiePie, has gone on record decrying Google policy changes that negatively affect his gaming channel's revenue [12]. Currently, streamers attempt to deploy dozens of complicated techniques, from disruptive banner ads to unrelated endorsements in a largely unsuccessful attempt to monetize content. While the act is normalized, it's most common for streamers to passively wait for donations from strangers.

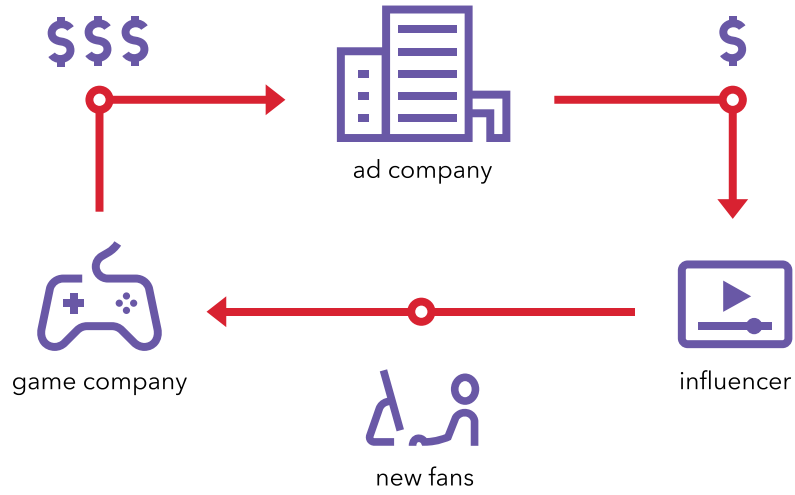
Game developers attempt to incentivize and reward players for recommending games to their friends, but the mechanisms through which to do this are obtuse, rudimentary, and expensive. The current approach to influencer marketing has employees manually identify possible influencers, cold-contact them one by one, and legally negotiate separate unique deal terms with each influencer. The process is not only time-consuming and costly, but also delivers unpredictable results. Expensive game marketers, struggling game developers, and frustrated influencers are seeing their margins getting thinner across every possible angle.

# Refereum Solution

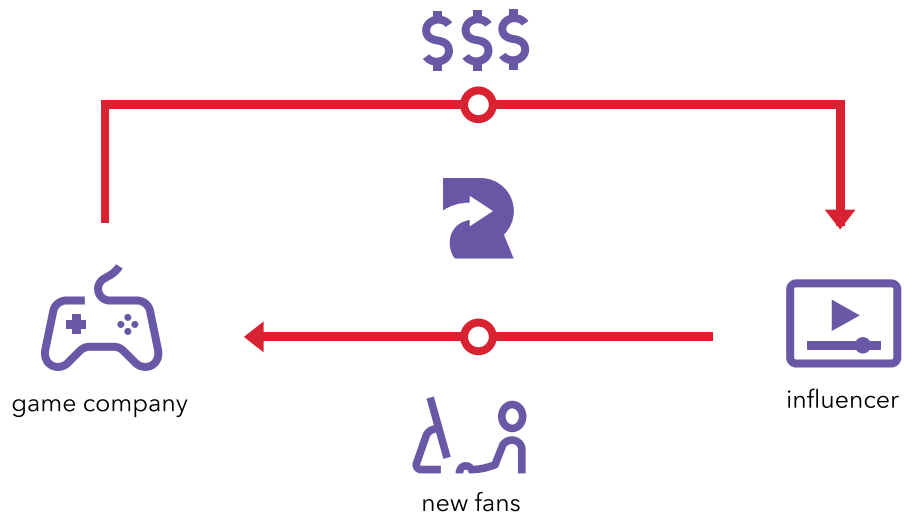
Refereum solves these problems with an open-market approach that scales across any influencer platform, country border, and language. Influencers have the agency to choose relevant and monetizable content that's for their fanbases. They have clear goals to earn Refereum that can be traded for cash value. Anyone with any level of influence can participate, including regular fans or individuals by simply sharing a game with a friend. Refereum enables unrivaled developer control over acquisition and reward criteria. Developers can choose what counts as a "referral," moving beyond the industry precedent of only counting installs. For instance, instead of paying for installs that result in little or no engagement, developers only pay for quality traffic that makes it past the first level. Additionally, even basic implementations of Refereum severely limit fake traffic and bot installs, as human input for gameplay is often more effective than a captcha [14] [15]. Game studios no longer require massive budgets and legal paperwork to offer players cash rewards. They can award anything from one cent for each viewer who joins a Twitch stream during a 12-hour launch window, right up to a flat \$10,000 eSports tournament prize. The economic rewards of the currency cannot be manipulated, because any tokens given out must first be bought and stocked into the game.

Influencer **adoption is accelerated by a close relationship with Twitch**, the most popular and established game streaming platform. Additionally, the implementation of **Refereum itself is made remarkably simple for game developers through Refereum's collaboration with Unity**, the most commonly used game engine. Award bounties will be highlighted in-game and on Earn. Refereum.com for anyone to access and earn. Having already built a public proof of concept of this technology, the Refereum team's work shows that such solutions are not only possible, but well within grasp.

### TRADITIONAL



### REFEREUM



# Blockchain Background

Blockchain is a relatively young industry, but its inherent freedom from geographical constraints and legacy payment systems, proficiency in resisting censorship, ability to bypass middlemen, as well as other technical feats, [16] has it surpassing a \$140+ billion industry valuation today [17]. The value of a cryptocurrency lies in the fundamental value it offers as a tool. The video game industry has specific and systemic problems that can be solved with blockchain. The \$427 billion typically spent on advertising can instead be redistributed to individual consumers via Refereum.

Quickly imagine a game of heads or tails. Two people can write a contract to bet money on the outcome of a coin toss. What if the contract was written on – or rather, in – the flipped coin? This is a smart contract. An Ethereum (ERC20) token is programmed with the information of the contract, the wallets of potential recipients, and a way of objectively determining the outcome.

Refereum blockchain contracts are based in real world influence and recommendations of fun. Refereum is a smart contract-based solution; users make a referral or fulfill some criteria, and the reward is automatically distributed to everyone involved. **It has been impossible to reward players with fiat currency because of complex legislative and geopolitical restrictions, but this blockchain solution removes such barriers.** It not only enables engagement rewards, but also connects and transfers value across previously separate game worlds. The global marketing industry is ripe for disruption by this smarter decentralized technology.






# Refereum Economy

The philosophy of blockchain revolves around decentralization [16]. Modern inefficiencies have been debilitating with no implementable industry-wide solution – until Refereum. For the first time, we can distribute and transact value without the need of an intermediary.

For an economic system to grow, there needs to be an ecology of needs, suppliers, and innovators. The **Refereum economy is primed for this growth with gamers, influencers, and game developers**. Developers buy Refereum to pay influencers. Players and Influencers extract real world value from their Refereum awards, or spend it in-game.

Developers purchase Refereum via credit card through a partnership with connext, or from any open market or exchange. The currency is easily implemented in a game by an asset store tool for Unity, or any other game engine. With open source and documented instructional use cases, game developers easily create triggers to reward Refereum in their game according criteria of their choosing. Gamers can link any wallet or address to receive Refereum. Refereum will then be traded for fiat currencies in numerous exchanges. As there is a finite amount of Refereum, any marketers purchasing it create a rising value of each Refereum token. Protection policies for the token will be deployed.

-  **Influencers**  
Refer others for Refereum to cash out
-  **Players**  
Earn Refereum to cash out or buy Refereum for content
-  **Developers**  
Buy Refereum to get prime traffic

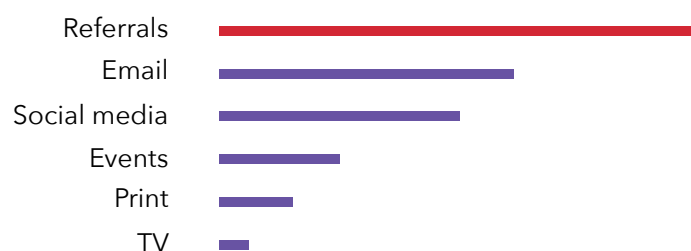


# Referral Success

Decision-making and purchasing behavior have revolved around social influence since the start of society. Referral marketing is highlighted as the key factor in countless success stories, from Dropbox to Uber. In general, 84% of people are driven by recommendations from people they know or trust [18] [19]. This is particularly true in the tight-knit and highly opinionated communities of gamers. Compared to other marketing channels, **referred consumers have the best conversion to purchase, a higher lifetime value, and better retention in a product** [20]. Of the \$924 billion global marketing spending, \$142 billion went to direct and referral marketing. This type of marketing is consistently prominent because consumers unwaveringly rely on others for recommendations.

Individual consumers inherently provide relevant product information to new customers through the context of the interaction. Social relevance provides this backbone, particularly in the game-playing space where multiplayer engagement is driven by groups and trends online. Referral success is no secret; an analysis of over 600 generalized consumer-facing companies revealed that 62% cited referral traffic as the most effective strategy [21]. Cognitive fluency confirms that the easier an offer is to understand, the more likely it will be accepted [22]. Offers with recommendation by referral are accessible, relatable, targeted, and trustworthy.

Developers who design referrals on social media platforms like Facebook have created some of the highest grossing games ever. In just one year, from 2008 to 2009, game companies that used referrals saw growth from 3 million to 40 million average daily users [24]. If we resist against companies self-centered changes to serve their own agenda, any game company can leverage these best-performing marketing techniques – forever.



## Earn.Refereum.com

Alongside in-game explanations, incentives can be set up and broadcast in an open source list of awards hosted on Earn.Refereum.com fueled by Refereum. This platform allows any consumer, marketer, or influencer to gain information about transparent bounties for games. For the first time, **influencers have agency in an open market to monetize what's relevant to them and their fanbase**. The instant payouts of the blockchain are featured with real-time updates, which creates urgency and adds to a fear of missing out on the cash awards. This highlights scarcity, which accelerates growth of the platform, encourages discussion of strategy to complete the awards, and even provides a thrill when securing awards. The criteria to fulfill awards will be up to the creativity of the developers, and will vary in terms of the types of engagement, the windows of time to complete the bounties, and the reward amounts offered.

This fidelity of developer control replaces the outdated key performance indicators that conventional marketing has revolved around for years. This fast-growing [25] open market will quickly complete a basic install referral cheaply, but the referral of a prominent eSports player would be much harder and rightfully more expensive. A YouTube influencer could demo a new game and encourage fans to buy it through their unique URL. That YouTuber would highlight that fans who use the link also get bonus Refereum, making all parties feel great about the purchase. A Twitch streamer could be specifically rewarded for playing a multiplayer game with their subscribers on release day. Game developers could even pay players to return to their games. This level of control opens a new world of incentivization possibilities for the game industry.



## Example Usage

### *Gamer*

Rod comes home after a day at work and enjoys playing his favorite competitive video game. He can't afford to quit his day job to enter an eSports team. Before, Rod felt that he might be wasting his time by playing too many video games without tangible return.

With Refereum, Rod sees that his favorite video game is offering a 1,000 Refereum token reward for the top 50 players on this month's leaderboard. Rod is good enough at the game to place in the top 50. He trades Refereum at a third party exchange, and pays his rent with his video game winnings. Rod now makes money playing video games, and can even consider quitting his job and making a living through participation in eSports tournaments instead.

### *Influencer*

Rachel is trying to support herself as a full-time streamer playing video games on Twitch. She has a solid following, but she's not in the top 1% of streamers. Before, Rachel had to wait and hope that strangers would donate to her stream.

With Refereum, Rachel can open Earn.Refereum.com and find a relevant bounty to complete. Her fans love to play multiplayer co-op games with her, so she chooses an appropriate referral bounty for herself and her fans. She streams the game and posts a unique URL for her fans to buy it through. Both Rachel and her fans get bonus Refereum if purchases are made through the link, so Rachel feels great mentioning the deal and rewarding her fanbase. When fans visit the stream and decide to buy the game – whether it's in general, or specifically to play with her – Rachel makes Refereum from every purchase. She can trade her Refereum to increase profits from her streaming career, using it to grow her following and further perpetuate her streaming success.

### *Developer*

Radical Games have spent their company savings creating an awesome action game they know players will love. Before, the studio had to spend their marketing budget on ineffective Facebook ads – or had to try to manually identify relevant individual streamers, source their contacts, attempt to negotiate a separate contract with each streamer, and then repeat the process as much as possible to try and get a return on the time investment.

With Refereum, Radical Games simply add the Refereum Unity plugin to their game, specify some referral criteria, purchase Refereum with a credit card (via partnership with connext) or on an exchange, and post the game on Earn.Refereum.com. They're happy to offer a considerable award of 3 Refereum tokens for every streamer's referral purchase, because they know they'll make the money back through the cost of the game. Radical Games can see and track links between in-game players and their marketing spending. Radical Games also offers a pool of Refereum that's split between anyone who beats the game on launch day, so that they make a splash on the Steam charts and maximize their return from minimal spend.

**“ We strive to help streamers and game developers. We know Refereum shares these goals, and we plan to keep collaborating on the future of game streaming. ”**

– Ernest Le,  
Director of Publisher & Developer  
Partnerships at Twitch



## Twitch – Top Influencers

Influencers' streams are well on the way to replacing TV [25] [26]. When Amazon purchased Twitch for nearly \$1 billion, some were surprised that a website dedicated to watching people play games could be worth so much. A closer look at its user base, user engagement, and user retention statistics shows why Twitch is so valuable.

Twitch has over 1 million unique broadcasters creating over 6 million videos a month. These videos attract 45 million unique gamers a month, each of whom watch this content for an average of 1.5+ hours a day [3]. The fact that Twitch has an API with numerous account and viewership statistics propels the creation of this flexible and highly automated bounty system. Reaching out to all these individuals separately is an impossible task, but setting up a bounty for any influencer to fulfill is easy. In this latter scenario, **campaigns do not have to be hand-targeted towards specific individuals; instead, engagement is driven by influencers themselves checking the platform.** The content they create is already an ad for the game itself, and Refereum capitalizes on this. Additionally, Refereum works across country borders with other top streaming platforms like Korea's Afreeca and China's Huya and Douya. Before Refereum, there were no marketing solutions that thrived in these intimate and real-time relationships between influencers and their fans. These incentives provide the perfect foundation for growth on a viral curve, as it offers the easiest and most effective way for influencers to monetize their passion.

## Unity – Most Popular Game Engine

Unity is the most used game engine ever. It has the largest market share of developer use and it deploys to every gaming platform – from mobile to VR. Unity games have been downloaded 5 billion times [27] by players on over 2.4 billion unique devices [28]. From their asset store, Unity will provide one-click implementation of Refereum tools for any developer in its immense ecosystem. It is an especially easy implementation for the majority of game genres that already rely on any virtual currency to progress. This tool allows developers to implement Refereum into any current or future game with ease.

**With trivial implementation for any game engine** (including Unreal, Crysis, Lumberyard, custom engines, and more), Refereum removes barriers for developers using blockchain technology. With such wide use, Unity provides the ideal home for Refereum to become the leading altcoin in the video game industry.



**“ We plan to support  
Referereum tools and assets to  
help developers keep being  
successful with Unity. ”**

– Ian Dunlap,  
Asset Store Manager at Unity





## Open Initiatives

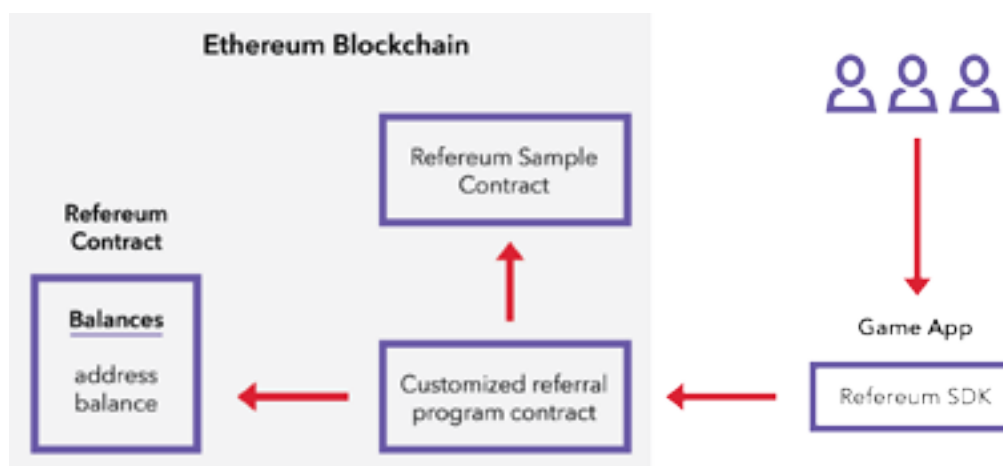
We believe in the open source approach for security, developer ease of use, further adoption of platforms, and its support for our core values of decentralization. Usage of this open source blockchain rejects centralization of control and mandates transparency. We have already created an open source example of earning (testnet) Refereum inside a game for anyone to see on Refereum.com. As developers implement rewards for influencers, they might look toward other applications of Refereum for best practices. Simple or widely useful implementations will be stored in a public and easily accessible repository with detailed documentation. Companies like Acquia and Red Hat have very successfully monetized open source codebases through custom implementation services. The software world has a strong list of success stories that open-source their efforts and offer services for industry players who happily pay for speed and quality development.

The architecture of Refereum's smart contracts are authored by Oleksii Matiiasevych, the same **white hat who rescued and returned \$1.4 million** [29] worth of Ethereum to projects and individuals during the multi-sig exploit in July. We have created a solid foundation and look forward to working closely with the open source community to provide the best technical solutions.

# Blockchain Architecture Overview

The architecture of the Refereum blockchain token is core to the technology and complies to the ERC20 [30] standard. Participating parties are expected to interact with the system using wide variety of Ethereum client libraries and nodes.

- *Refereum contract*. The primary refereum contract, maintained by Refereum.
- *Refereum Sample Contract*. Reference referral program contract, provided in Refereum plugin tools / SDK. Includes a referral fee distribution mechanism.
- *Game*. Developed by other developers, these solutions can use customized referral program contract to allow developers freedom in their criteria.
- *Refereum plugin / SDK*. Provided by Refereum to streamline the usage of its smart contracts for C# and C++ programming languages.



```
contract ERC20 {  
    function totalSupply() constant returns (uint totalSupply);  
    function balanceOf(address _owner) constant returns (uint balance);  
    function transfer(address _to, uint _value) returns (bool success);  
    function transferFrom(address _from, address _to, uint _value) returns (bool success);  
    function approve(address _spender, uint _value) returns (bool success);  
    function allowance(address _owner, address _spender) constant returns (uint remaining);  
    event Transfer(address indexed _from, address indexed _to, uint _value);  
    event Approval(address indexed _owner, address indexed _spender, uint _value);  
}
```

# Conclusion

Altcoins began with video games. One of the first massively adopted Bitcoin exchanges was based almost entirely on game currency. Now, the benefits of blockchain circle back to evolve the way video games are played.

Entertainment is one of the most joyful aspects of the human experience. Refereum evolves digital marketing and engagement, rewards players for sharing their enthusiasm about a game, and bypasses middlemen to acquire targeted players for less. **Refereum empowers game influencers to effectively monetize their community, maximizes game studio marketing spend, and allows anyone to make money playing video games.**

## Team Leads

Our team consists of industry veterans in both the game and digital advertising space. Get more information regarding team member's blogs, social media, past work history, and more on [Refereum.com](http://Refereum.com). We also work with a team of top smart contract developers working for Ambisafe. Get even more details by contacting [team@Refereum.com](mailto:team@Refereum.com).



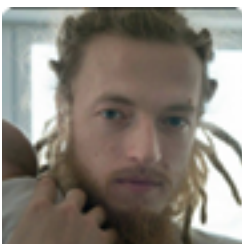
### Dylan Jones – Founder

Dylan is well-versed in the challenges of making successful games; after helping design some of the highest-grossing Facebook and mobile titles of all time, he spreads the knowledge by working with developers at various game platforms. He founded game co-working space Gamenest, and advocates decentralized systems at conferences globally and his wide-reaching Meetups in San Francisco.



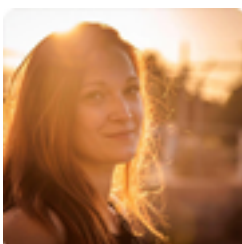
### Alistair Doulin – Chief Technical

Alistair is a game industry veteran who has worked on multiple high profile game and engine projects. He's a successful programmer, speaker, blogger, and dedicated Ethereum miner, while also advising on multiple creative and enterprise cryptocurrency projects.



### Oleksii Matiasevych – Smart Contract Author

Oleksii saved and returned millions of dollars of Ethereum in July's multi-sig exploit and mentors others to mature blockchain security. He writes Refereum's smart contracts.



### Sloane Earl – Business Development

Sloane started her career in the game industry as a traditional and digital concept artist, with her industry knowledge and charisma soon leading her into a role as Business Development Manager at game animation studio Plastic Wax. She now travels internationally, visiting studios and conventions in search of the industry's best talent and most exciting projects.





### Nick Klingsmith – Tools Developer

Nick single-handedly created some of Unity's most downloaded tools on the asset store. He also spent four years at Zynga as a tools programmer. When he's not helping developers make their games better, he's maintaining his Ethereum nodes.



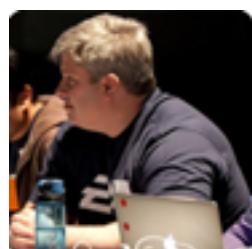
### Brad Johnson – Game and Web Developer

Brad develops game and web platforms and is a consistent altcoin trader. He comes from a long background of testing and security on notable titles, such as the Star Wars franchise at LucasArts and has since shifted to making web platforms.



### Katie Williams – Communications

Katie has been writing about games for a decade; she is primarily known for her journalism work for online and print outlets including IGN, PC Gamer, GameSpy, PC PowerPlay, and more. She is now an editor at Google Play, where she shapes the editorial vision of Google Play's new Editors' Choice for games..



### Mark Maratea – Engine Developer

Mark is a game industry veteran with over 15 years of experience. Having created key architecture for a variety of games at EA, there's nobody better to help others with the implementation of Refereum.



### Zane Witherspoon – Blockchain Developer

Zane is a well known blockchain developer in the Bay Area, having worked and advised on multiple startups in the space like Rakugo. He is also known for being very active in the Ethereum scene, running multiple Ethereum meetups.



# Advisors

Visit us online to learn more, or contact [team@refereum.com](mailto:team@refereum.com).



## Ilan Dunlap

Ilan has spent over five years at Unity managing the Unity Asset Store ecosystem.



## Koh Kim

Koh currently advises game startups on marketing and business development strategy. During her Google tenure, Koh helped launch and grow multiple Google products in business development and marketing roles. She was also an early member of the Google Play Games Business Development team where she led international market expansion with industry influencers.



## Andrii Zamovsky

Andrii is the founder of Ambisafe, managing its world-class smart contract team and leading its initiative to bring blockchain to the mainstream.



# Roadmap

✓ Open source demo based on Refereum for public use on the testnet, allowing Refereum to be spent in games.

✓ Preparation for token sale in coordination with legal, partners, and advisers.

Q2 2018 - Completion of the core Earn.Refereum.com functionality with open source technical implementations and game developer documentation.

Q3 2018 - Comprehensive Twitch API integration with Unity asset store tools (and other engines), with detailed open source documentation for developer best practice engagement options.

Q4 2018 - Additional features and marketing with top games for the Earn.Refereum.com. Partnering with connext, anyone can purchase Refereum with credit cards.

Q4 2018 - To further drive token usage, we'll partner with and incentivize top Twitch games and streamers to maximise the Refereum ecosystem.

Q1 2019 - Further partner and fund exclusive Refereum content with eSport sponsorships and maximising Twitch API integration with our Unity plugin.

Q1 2020 - Accelerate expansion into additional industries using Refereum. Starting with other high-use referral industries (from dapps to fashion) we'll rapidly broaden our affiliate traffic backend for any industry.



# Allocation

The Referuem token allocation stands as:



● Token sale (2% bounty):	50%
● Development of platform:	25%
● Incentivize game developers:	10%
● Founders:	10%
● Attract influencers:	5%

# Token specifications

Currency Code	RFR
Type	Utility Token
Decimal places	4
Reissuable	Yes
Total token premine amount	5,000,000,000
Token sale amount	2,500,000,000
ICAP currency code	RFR
ICAP organization code	RFRM

Tokens can be purchased on Refereum.com during the sale. Further details of the sale will be announced. Tokens are purchased with Ethereum and Bitcoin. Tokens will be required for the main value proposition of the platform. Tokens are inherently functional in both their utility for the value proposition proposed and in our example game today.

# Utility Usage Review

The Refereum token acts as a utility payment for Earn.Refereum.com, and for transferring value between holders. Like many virtual coins or items in games, Refereum tokens hold real cash value for content. Currently, players invite friends into a game in order to obtain virtual coins that unlock new content, or simply purchase the coins outright. Similarly, the Refereum token holds the same value for this content and for the act of inviting friends.

Purchasers first buy the tokens. They implement the Refereum plugin into their game or product, and set specific criteria on how to unlock Refereum tokens. They may also choose to charge Refereum tokens in their game or product using the same plugin. This plugin then rewards players or users with Refereum virtual coins. This plugin makes basic implementation easy, and further criteria will be set in the game's code and native language. It is the game's plugin and secure blockchain protocol that rewards tokens. Twitch, Unity, and other large platforms do not have to hold or deal with securing tokens, keeping the coin platform-agnostic.

Potential purchasers can buy these Refereum tokens for use during the token sale on November 13th, 2017. Eventually, there are planned other purchase options through partnerships with connext, who specialize in allowing anyone to buy ERC-20 tokens via credit card. Players or purchases may trade these tokens between themselves using various methods. (Refereum does not offer a way to trade tokens, but it's common for third party exchanges that specialize and are legally compliant for such goals to deliver this; Refereum will be available on such exchanges.) Gamers use tokens to trade for in game items or selling their value. Influencers can monetize their fanbases by earning, trading, or selling the tokens. Developers use this coin to market their games more effectively or offer prizes.

Please visit [Refereum.com](http://Refereum.com) for more information regarding the utility of the token. The token can be used upon receiving the token. For additional utility specifics, please see the posted token memorandum.

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## Disclaimer

Participation in a token sale can be highly speculative and could involve a risk of loss. This White Paper does not constitute the offering of a security. Refereum, Inc. has consulted with legal counsel to assess the possible regulatory treatment by the U.S. Securities and Exchange Commission and relevant foreign authorities in light of developing regulatory guidance. The primary mechanism for determining whether an instrument is a security in the United States under United States securities laws is the Howey test, articulated in *SEC v. W.J. Howey*, 328 U.S. 293 (1946). The Howey test posits that an instrument is a security if four factors are satisfied: (i) an investment of money; (ii) in a common enterprise; (iii) with an expectation of profits; (iv) solely from the efforts of others. Most recently, the SEC Division of Enforcement's investigative report involving DAO tokens revealed that tokens that function like investment contracts under Howey will be treated as securities. The DAO Report applied the Howey test to digital tokens offered and sold by a virtual organization known as "The DAO," and concluded that the tokens were in fact securities. The SEC did not take the position that virtual currencies, or interests in such currencies, are themselves securities. In the United States, the implication of the DAO Report is that depending on the facts and circumstances of an individual token sale, the virtual coins or tokens that are offered or sold may be securities, and that if they are securities, the offer and sale of these virtual coins or tokens are subject to the federal securities laws. Although the Howey test has not yet been directly applied by the courts to any digital currency or blockchain token, a Howey analysis has been conducted to determine that, as currently designed, the sale of RFR utility tokens may not pose a risk of implicating federal securities laws. As such, the RFR tokens, have not and will not be registered or filed under the securities laws or regulations of any jurisdiction. Further, as this is a sale of utility tokens, it is not being provided through any of the exemptions under the United States Securities Act. Additionally, although the regulatory treatment of token sales is a live and developing issue and no assessment is conclusive, a legal analysis has been conducted to determine that, as currently designed, the sale of RFR utility tokens may not pose a significant risk of implicating foreign securities laws in jurisdictions that have addressed token sales. Specifically, in Singapore, because the RFR tokens do not represent an ownership or security interest in Refereum's assets or property, the tokens may not be considered an offer of shares or units in a collective investment scheme. In Canada, because the RFR token sale would not meet the Pacific Coast test, which mirrors the Howey test, the tokens may be unlikely to constitute securities subject to Canadian securities regulations.

In Australia, because the only official guidance regarding the treatment of token sales only applies to token exchange platforms, the RFR token sale is likely not subject to Australian securities regulations at this time. In South Korea, given that the particulars of the proposed regulatory measures regarding token sales have not been publicized or finalized, we cannot at this time provide even a preliminary assessment of how the token sale is likely to be treated for purposes of South Korean securities laws. In compliance with U.S. and international trade laws, prospective purchasers located in, under the control of, or a national or resident of any restricted location or country to which the United States has embargoed goods or services, are prohibited from participating in the token sale. For example, in China where all ICOs and token sales have been frozen, allowing Chinese purchasers to participate in the RFR token sale would currently be unlawful. As such, Chinese purchasers are prohibited from participating in the token sale. This token sale will also not be available to Brazilian purchasers as Refereum, Inc. is not registered as a crowdfunding platform per the new guidance issued by the Comissão de Valores Mobiliários (“CVM”) in Instrução CVM No. 588. Furthermore, the token sale will not be offered in other restricted jurisdictions including, but not limited to, Iran, North Korea, the Sudan, Syria, and the Crimea region of the Ukraine. Although due diligence has been conducted and Refereum, Inc. has taken steps to mitigate regulatory risk, given that blockchain is a young industry and token sales are a novel and evolving development, there is inevitably a degree of uncertainty with any token sale. Given the rapidly changing regulatory landscape and warnings signaled by multiple international jurisdictions regarding the potential for tokens to be viewed as securities offerings, there is always a risk that the RFR utility token may not be exempt from securities registration requirements in the United States or any other jurisdiction. Many international jurisdictions have indicated that token sales may qualify as sales of investment contracts, or qualify as crowdfunding sales under pre-existing regulations, and may be regulated as such. In view of the guidance recently received from these regulatory authorities, it is likely that a growing number of jurisdictions will be closely scrutinizing token sales. Refereum, Inc.’s representations and securities assessment is not a guarantee that the SEC or any other regulatory authority will not determine the tokens to be securities subject to registration. The RFR tokens have not been approved or disapproved by the United States Securities and Exchange Commission, any state securities commission in the United States or any other regulatory authority in the United States.



The same applies to relevant regulatory authorities in foreign jurisdictions, including, but not limited to, jurisdictions who expressed any form of guidance as to initial coin offerings and token sales, such as Australia, Canada, China, South Korea and Singapore. Should Refereum's tokens be deemed securities by the SEC, or another regulatory authority, Refereum, Inc. and participants in the RFR token sale may be subject to civil or criminal penalties if the tokens are not properly registered. Prospective token purchasers should not construe this White Paper as providing any legal or tax advice. This white paper currently contains a fair summary of Refereum, Inc.'s vision and the operation and utility of its token.

Further information is provided in its Token Sale Memorandum, including the merits and risks involved in participating in Refereum, Inc.'s token sale.

