Profile Utility Token (PUT)

Blockchain Based Profiling

Robin8

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Abstract

There is perfect storm globally with a huge explosion of fake data. Advertisers face mass quantities of fake data never seen before. Consumers are more vulnerable than ever to fake news and to having their personal data used by third parties without their permission. Content creators have no control over their copyright and IP.

Robin8 is a consumer profiling and social marketing platform powered by big data and AI that offers a new advertising channel focused on people as media. Robin8 trains machines to profile, rank and match people with brands to achieve better advertising ROI. In addition, the company provides an automated system for tracking, transparency, third-party digital advertising verification, social media and e-commerce measurement, and data management. The Robin8 programmatic platform offers complete automation and scale.

The main challenge for the advertising industry is fake data, online fraud and then precision marketing. For content creators and influencers, they are worried that other parties are taking their IP and copyright for their content, images, videos without compensation, knowledge and permission. For consumers, they face unprecedented levels of fake news as seen in the US presidential election where Facebook sold over $100,000 in ads to Russian companies and fake Russian accounts. In addition, social media platforms are taking advantage of the consumer's personal data without their permission.

Personal profiling (the collection of personal data into a profile) and the uncontrolled amount of available personal data has become an immensely lucrative business. The market for personal profile data, used by technology companies, credit bureaus, advertisers, publishers and government entities, has become overrun by ad exchanges, profile "vendors", audience segmentation and data management platforms. All the while, the consumer is not privy to this transaction and is not able to control, access or monetize his or her own data. The situation has gotten so bad that recently, EU regulators have taken action to control big social networks such as Google, WeChat and Facebook for abusing unwanted use of personal profiles.

The solution for this perfect storm is a decentralized, transparent profile management system based on Blockchain. The first component is Robin8 social profile (a profile is a record of the data about a single person), a mobile App that builds in a ledger system that measures profile access and usage. Simultaneously, this will also solve the main

challenge for advertisers by providing trust and transparency by having a decentralized ledger where people can no longer buy fake data.

In the Robin8 blockchain marketplace and ecosystem, when a buyer wants access to data, they will purchase Robin8 coins to pay the data owner (consumer, influencer, content creator). Similarly, if an advertiser wants content or people to view their content, they too will purchase Robin8 coins to pay the content creator for the content, or to pay the people to view and share their content. The same rules will apply if the consumer wants access to premium content, the consumer too will have to purchase Robin8 coins to pay for the content creator. On the supply side of the Robin8 marketplace, the coin recipient that is paid the Robin8 coin can redeem their Robin8 coins for cash or keep for future appreciation.

Robin8 introduces PUT (Profile Utility Token), a token for a decentralized profile exchange. It puts the consumer in charge and compensates them for their profile data while protecting privacy. PUT connects advertisers, publishers, creditors, companies and other consumers and is denominated by common profile tag. It will put control of personal profiles back to the profile owner. Anyone will be able to maintain a trusted profile that they control and can use for their own purposes. In addition, when a person views, clicks or shares ~~a~~ content, we will know exactly who that person is and the profile associated to this ID. In industries such as advertising, it removes social and economic costs associated with existing ad networks, e.g., fraud, privacy violations, and advertising abuse. Starting with social media and influencer marketing, PUT is a payment system that rewards and protects all parties involved. In the world of social media, the consumer can be a micro-influencer, a follower of an influencer, or an end consumer. PUT can become a universal standard that crosses borders, cultures and languages. We see PUT and associated technologies as solving the important problem of managing and monetizing the consumer profile, attention and social influence while protecting the consumer's privacy and giving the power and control of the consumer profile data back to the consumer to which it belongs.

Table of Contents

1. Value Proposition

We propose the PUT as a token of exchange in a secure, opt-in profile system based in a search engine and mobile App. The PUT system provides:

- Consumers: strong privacy and security when sharing profiles and related content, improved relevance and performance, and a share of tokens.
- The PUT will give people control of their own personal data
- Influencers: improved revenue, better reporting, and ability to get fully credited for influence.
- Advertisers: reliable customer reach and engagement, less fraud, and better data analysis.

The initial adoption of the PUT system will be for social media applications.

2. Introduction

Before the Internet, personal data was generated slowly and kept on isolated, and often manual databases. Social data was limited to school year books or in the letters or diaries maintained by friends and families. Financial records were maintained in the isolated vaults of banks and reported to central reporting services that had limited access to information. Health records were largely manual and dispersed among the various medical providers.

In the last twenty years, two major trends changed the nature and availability of personal data and the related profiles. First, the Internet made it possible to communicate electronically with virtually everyone. The rise of email and messaging services created a personal data footprint that proliferated the scale, amount and availability of information. This new data flow created scores of new enterprises focused on capturing and monetizing the value of this data. Personal profiles went from a limited domain of information to a vast quantity of data that could be exploited by many. The individual lost awareness and control of their data without any real understanding of its consequence and impact. While this may appear to be an invisible non-issue to many consumers, greater awareness on the value and potential control of data would likely interest many consumers.

The second major trend was the rise of social media, led by Facebook globally and WeChat in China. Suddenly, personal data was added to global Internet in a way that

could be easily shared and copied. Personal profiles have morphed into a growing sea of data, being used by many but with unknown control. The largest social companies, Facebook and Google, have become the central vault of profile storage, with opaque controls and profitable intent.

It is time for all consumers to take control of their data and personal profile. How can this be possible in a socially connected, always searched and shared world? What are the benefits and who should benefit?

An initial use case for PUT is social advertising. The promise of advertising technology ("ad-tech") was to create a more efficient and transparent marketplace matching advertising with targeted consumers. Digital technology was supposed to make it easier to track the flow of transactions between advertisers and the target market to be sure the message reached intended consumers.
Given the power of technology and reach of social media, the hope was that Ad tech would "get marketers closer to their consumers via trusted Influencers, and immediate distribution." Data would be used to "accurately identify audiences, determine the value of those audiences, and deliver the right messages to them instantly." In short, consumers' social network would be valued properly.

The ad-tech ecosystem that has evolved over the last two decades is a bewildering variety of middlemen and complexity. Additionally, ad-tech introduced a host of correlated problems for publishers, influencers, advertisers, and consumers. Consumers lost their privacy, face issues of network trust and transparency and subjected to fraud. Publishers have lost billions in revenue while fraud has skyrocketed. And advertisers face poor reporting and targeting. A good solution is clearly needed.

This paper outlines a new solution that creates a transparent and efficient Blockchain-based marketplace for publishers, advertisers, influencers and consumers, accurately valuing and rewarding the key driver of advertising and Internet content: a trusted user profile.

2.1 Are Personal Profiles a Feature, a Product, or a Market?

Personal profiling, while often only a small consideration throughout history, has been used as an important component to understand the advertising value, raise it to a level of Interest to incite some desire that can then translate it into action. The earliest forms of advertising date back to ancient Egypt, China, Africa and the Middle Ages in Europe. The print form of advertising began to expand widely with the growth of 19th Century printed products. Given the relative homogeneity of historical audiences, personal profiles could be broadly aggregated into categories such as age, gender, and income. Additionally,

mass messaging dominated since there were relatively few media outlets. This marketplace of advertisers, publishers and consumers remained relatively straightforward – despite some additions – even as the new media of radio and television arose.

The rise of the Internet created a new level of advertising technology with greater transparency and better information, two critical elements that had the potential to radically improve the efficiency of user profiles and their value to advertisers. Somewhat counter-intuitively, the sheer complexity that organically developed has brought the opposite result. The system isn't generating the full expected benefits and has created a major negative externality: the unmanaged profile. We define the "unmanaged profile" as the proliferation of personal data and stored personal profiles on a wide range of sites on the Internet.

The advertising and marketing ecosystem has become more complex, with more players benefiting, either directly or indirectly. The complexity of this ecosystem increases the costs and difficulty of the tasks for the digital marketing and advertising teams. The rise of eCommerce and the proliferation of choices also introduced a new challenge: the customer journey. Besides the historical marketers concerns for advertising to drive brand recognition and sales, they need to understand what happened before the customer actually made a purchase. This has made personal profiling even more important: how to figure out the steps a particular customer follows in choosing a brand.

2.2 The Profile Marketplace

Before social media, the cycle of advertising and marketing was relatively simple: Brand marketers published ads or content that was placed in print or video channels to be consumed by target buyers. Profiling of the consumers or buyer pool was limited to traditional research methods such as surveys and focus groups. The Internet and social media has changed that. Now consumers publish content on their social networks and make comments on product sites and other parts of the digital universe. The companies capturing consumer published content can profile consumers and extract targeting information that can be sold to advertisers and other buyers of profile information. The consumer is largely unaware of the type of profiles being captured, the amount of data and the monetization of their profile. Consumers are rarely compensated and privacy is often lost without knowledge or warning. The consumer is left without control of their content, data or privacy while being subjected to potential nefarious activity.

Marketers currently budgeting for brand advertising are required to account for an excessive number of intermediaries that stand between the ad and the end user. Agencies, trading desks, demand side platforms, desktop and mobile network

exchanges, yield optimization, rich media vendors and partnered services often consume significant portions of creative and delivery ad budget. It is also common for agencies in charge of packaging brand campaigns to use data aggregators, data management platforms, data suppliers, analytics, measurement and verification services to fight fraud, enhance targeting, and confirm attribution. These factors add up to a high transaction cost on the efficient provision of attention to brand ad campaigns

Advertisers face fraud (or fake data), while consumers are increasingly encountering malvertisements i.e., fake ads that trick consumers into clicking on them and then downloading malicious code, including ransomware. They can also entice consumers to visit fake domains used to steal financial information. According to a 2015 study by EY commissioned by the Interactive Advertising Bureau (IAB), fraud is a US$8.3 billion issue. The types of fraud are fake data (click fraud, fake users, etc.), infringed content (misplaced content due to poor targeting or fake users) and malvertisements (lost revenue due to malware related ad blocking and blacklisting).
Much better personal profiling should be able to identify fake users, click fraud (by validating a real consumer), and reduce infringed content and malvertisements by assisting marketers in understanding the legitimacy of their users.

This challenges for advertisers has only gotten worse over the last few years as Google and Facebook, or WeChat in the case of China, have taken more and more share of advertising revenues. Google, Facebook and WeChat have most of the market power at the expense of advertisers, influencers, followers and end consumers that could benefit from efficiently getting messages from those in their network and not under the control of the dominant social media platforms.

Advertisers on these platforms also face serious challenges. The sheer size of the major social media platforms makes them difficult to fully assess the effectiveness of advertising campaigns on their platforms. Since most of the analytics products targeting these platforms are provided by the platform owner, principal-agent conflicts arise. Some advertisers have decided that traffic coming from the walled gardens isn't worth the trouble. Some have even suggested based on third party analytics that a large proportion of the traffic is without value to the advertiser. There is the additional challenge determining attribution or the customer journey.

In an effort to expand their walled gardens and to reinforce market dominance by traffic and data otherwise ingested from consumers directly on the publisher domain, major platform players have begun offering alternative content delivery channels with claims of better placement and a faster, more secure user experience. All this speaks to the need of consumers taking control of their profiles and advertisers getting back transparency, choice and trust.

Also, the publishing industry faces an existential threat. Legacy publishers (such as Hearst, Times Mirror, the Washington Post et al) have faced declining revenues for years. Pressures on publishers and big Influencers (usually celebrities) to create content optimized for clicks has resulted in cut-backs to long form articles, investigative journalism, and foreign news bureaus, and has caused the much-lamented social cost named "clickbait." Although "clickbait" is not directly impacted by personal profiling, the costs associated with this issue drains the marketing budget and creates a distraction from much more effective advertising. This dysfunctional dynamic has been noticed across the industry. Marketing budgets continue to climb, yet publisher revenues are static or shrinking given the audience being fragmented into social media and other news sources. This indicates serious market inefficiencies which can be repaired with a simplified and more efficient economic system based on new technologies.

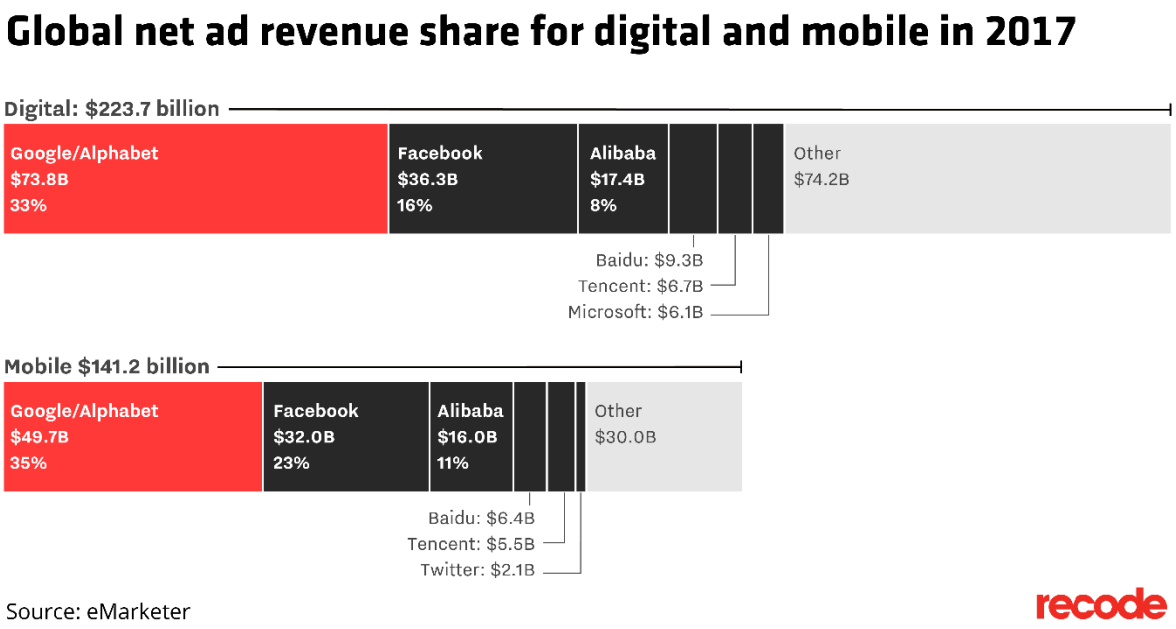

Figure 1. Ad Revenue for Google vs Facebook vs Others

3. A New Deal: Profile-based Economics on Blockchain

The diversity of profile uses and the lack of visibility to the advertisers, publishers and consumers make simplification of the present digital social ecosystem inevitable. Present trends are toward an oligopoly where gatekeeper companies such as Google, WeChat and Facebook control the most profiles and the majority of online marketing budget with

publishers powerless to control their revenues. This domination makes the entire ecosystem for advertising and other profile uses subjected to a few outlets that have little interest in the safety or proper wellbeing of the user.

User profiles are valuable, but they haven't been properly priced with an efficient and transparent market system. The personal profile data has been too disbursed among multiple companies and privately held to achieve good market based pricing. While it has become a platitude that vast amounts of information are generated on and by the Internet, human beings are only able to devote a limited amount of time to certain small subsets of the information. Information in the modern age is relatively cheap. Getting fully trusted profile data used to generate information is the rare quantity.

3.1 Profile Utility Metrics

To improve the efficiency of social media advertising based on trusted profiles requires a new platform and unit of exchange. If personal profiles were controlled by the person that it applies, and the data was trusted, it could be an independent asset that could be measured and valued. The Robin8 Mobile App, a fast, privacy-focused App, will contain a ledger system that anonymously measures user profiles.
The next phase involves the introduction of Profile Utility Token or PUT. It is a token for the decentralized ad exchange. PUT connects advertisers, influencers, publishers, and consumers (typically the influencer followers), creating a new, efficient marketplace. The token is based on Qtum technology, an open source, blockchain-based distributed computing platform with smart contracts. These cryptographically secure smart contracts are applications stored in the Qtum blockchain, fully capable of enforcing performance. The token is derived from – or denominated by – user profiles properly connected with other trusted profiles.

In-device and cloud supported artificial intelligence will rank and match relevant brands to influencers on a level that middlemen with cookies and third-party tracking are unable to achieve, regardless of how much of the user data is extracted and monitored from external models.

User engagement through genuine feedback mechanisms ensures that consumers that have opted in for PUT are getting the best possible product match, that which they are most likely to convert into a transaction. Ultimately it comes down to trust and respect with and for the user. By keeping the data within a Blockchain, encrypting the data and shielding the identities of our consumers, PUT forms a bond with consumers that proves not only does their data hold value, it holds substantial value that has been ignored and or exploited by the middlemen in the current industry model.

Several scoring algorithms are being developed with the Robin8 ledger system, which automatically pays an amount proportional to the profiles used by the content shared or the related website.

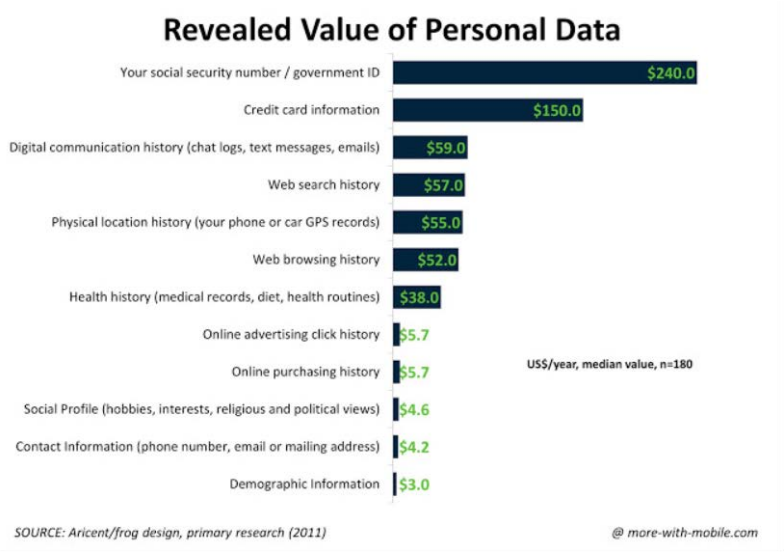

Figure 2. Value of a Personal Profile

Number of exposures, measured in the unit of clicks obtained, will be the base of all PUT calculation. For different social platforms in China (the targeted first market for launch), since the definition of click and the quality is widely different, we will measure the price per click will measured differently. The value of profile, or PUT/ campaign, will be the combination of expected exposure from the social platforms. Use P to denote PUT per click, and C as the number of clicks, then the PUT/ campaign will be:

$$\text{PUT/ Campaign} = (P_1C_1 + P_2C_2 + \ldots + P_nC_n) * \text{relevancy factor}$$

The formula is built under two principles:

1. The result of the campaign, or the amount of PUT that a user gets paid for becoming the promoter of a brand or event, is the aggregated result of his/ her influence across various social platforms. This encourages user to connect more social platforms in the Robin8 network, helping us build a more complete social profile for the user. On the other hand, the completeness of profile (a function of both quantity of social networks connected and quality of network) helps the user to gain more financial benefits, as well as more suitable campaigns.

2. Influence on different social platforms can be standardized to a single unit, which is PUT. While different social platforms have different ways to measure the

popularity and influence of a user, the result of promotion can be generalized and aggregated to best reflect one's advertising value. The Robin8 influencer models take these issues into account and using AI to refine the results. This will help guide the value of the PUT.

3.2 Token Technology

The Profile Utility Token (PUT), a token based on Qtum, is an important element of a new marketplace. Qtum is an open source, blockchain-based, distributed computing platform oriented towards **smart contracts**. Effectively, Qtum is a distributed virtual machine that allows end consumers to construct smart contracts for transactions. Smart contracts are applications stored in the Qtum blockchain. These contracts are cryptographically secure and can verify or enforce performance of the contract. Token contracts are a standard feature of the Qtum ecosystem.

The high-level concept is the advertiser sends a payment in token along with ads to influencers in a locked state (Xa). As the advertiser views the profiles, the flow of payments unlocks, keeping part of the payment for their own wallet (Xu), and passing on shares of the payment to Robin8 (Xb) and passing the remainder on to the Publisher/INFLUENCER (Xa-Xu-Xb). In the case of this model, the Publisher can be source of consumer traffic and display without the use of an INFLUENCER.

The PUT will be specifically tied to Robin8 Mobile Apps and Robin8 servers, along with verified influencers. Fraud will be prevented or reduced by publication of source code and cryptographically secure transactions. Profiles served to individual advertisers/Influencers/followers/consumers will also be tied to active events. In other words, given the connections are linked by Blockchain, it is easy to know that it is an active, related event. Payments in PUT will be sent only to INFLUENCERs, though a payment for viewing shared content on one publisher (social platform) may be used at another publisher or kept for some other premium services supplied through the PUT system.

3.3 Token Used as INFLUENCER Payment

Payments will be through the PUT system. For the first deployment of PUT, the transactions in PUT will take place through the Robin8 Ledger system, which is an open source Zero Knowledge Proof scheme presently deployed to allow Robin8 advertisers to make anonymous contributions to influencers using bitcoin, ETH or Qtum as the medium of exchange. The Robin8 Ledger system will finalize the best algorithm to protect user privacy.

For the first version of PUT, all payments in PUT must have an INFLUENCER profile measurement. The measures reach and engagement score based on a fixed threshold value for all profiles and viewing the page for a minimum of 5 seconds, and a bounded score for the amount of time spent on the page. A synopsis of user behavior is then sent back to the Robin8 Ledger System for recording and payments made based on the scores.

A fully distributed ledger is desirable, both for public accountability and potential scalability reasons. Influencers, publishers, advertisers and consumers (followers) of the PUT token will have incentive to use such a system to keep track of payments within the PUT system.

Channels allow for multiple small transactions with strong anonymity guarantees when using the correct matching algorithms. Several state channel schemes are being reviewed to be integrated with the Qtum ecosystem, and new blockchains as well as new systems that offer stronger privacy guarantees with rapidly increasing feature sets. It is likely that a new scheme addressing the unique problems of this type of transaction will be used for large scale multiparty transfer of PUT.

A lottery system may be used, with payments happening essentially in the same way that coin mining works with proof of Profile availability instead of proof of work, Zero Knowledge algorithms may become part of this stack for guarding privacy of participants. The PUT situation is mitigated by the fact that the privacy of the Influencer and their followers is of primary importance; publishers and advertisers have fewer privacy concerns. The transactions in a fully distributed PUT system will almost always be one to many and many to one, therefore novel zero-knowledge transactions may be deployed in this system.

As Robin8 moves to a fully distributed micropayment system, we expect other developers to use our free and open source infrastructure to develop their own use cases for PUT. We want PUT and the tools associated with it to eventually become important part of Internet 3.0 for future development of web content. Publishers, advertisers and consumers who view web content deserve a private, secure and well-engineered future.

3.4 Tokens for User Application

As consumers become micro-influencers and are given access to some of the advertising spend in PUT, they will become an important and active part of the advertising and publishing economy, rather than the passive participants they are presently treated as. While tokens can be paid to individual influencers, content providers and publishers, there are any number of use cases for the tokens.

An obvious use case is for very specific targeted advertising. Many small businesses have modest requirements which may be well served by tokens they acquire through their normal content marketing activities. Advertisers may also find new uses with low barrier to entry highly targeted ads; personal ads targeting people of a certain interest group or subculture for example.

Some big influencers or publishers may have premium content they would ordinarily only offer to subscribers. Since subscription models are not always favored by consumers on the internet, this could unlock new revenue for premium content providers. Content may also be bought for friends using the token; if someone likes a premium article, they can make a micropayment to send it to three of their friends. The PUT could be highly valuable to these publishers.

Higher quality content, e.g., high quality video or audio on an entertainment channel, may also be offered to consumers for a PUT transaction. Video or audio content in a news or other information source may be restricted to people who pay a small micropayment.
Comments may be ranked or voted on using PUT tokens, similar to the "thumbs-up/thumbs-down" on some comment sections. Comment votes backed by PUT may be given more credibility because someone cared enough to back the comment with what would be a limited supply of token (since PUT holders would spend their tokens judiciously), as well as the fact that a token transfer can be verified as coming from real people rather than robots. The right to post comments may also be purchased for some minimal payment, to cut down on abusive commenters.

Eventually, PUT may be used within the Robin8 ecosystem to purchase digital goods such as high-resolution photos, data services, or publisher applications which are only needed on a one-time basis. Many influencers and publishers have access to interesting data sets and tools which they are not able to monetize on a subscription basis, but which individuals may wish to occasionally use. For example, firms such as iResearch Group contain interesting public data and premium content, but many individuals find a subscription too costly. Small parts of news archives may also be of interest to people who do not want to purchase access or a subscription to the entire archive.

PUT may also be used in games provided by publishers within the Robin8 eco-system. While such applications are not presently popular with publishers, many platform providers have hosted profitable gaming applications. It could create a new economy of app creators to go along with content. People won't get out their credit card or Alipay to use such an application, but they may be willing to part with some value they acquired in normal social networking activities to enjoy connecting with their favorite entertainment figure.

Custom company stock alerts may be offered as a service by news providers for a small payment of PUT within the ecosystem. Such news alerts may be very valuable to individuals who are concerned with current events, financial news or some anticipated event.

3.5 Roadmap

- Pre v1.0 PUT: Robin8 already has a ledger system for making payments to Personal INFLUENCERs based on social sharing. The next step is to develop a secure vault using zero knowledge or other appropriate algorithm to ensure customer privacy is an important piece of the PUT ecosystem and deployed in Robin8. Robin8 is already measuring Profile completeness and estimated value for each advertising campaign and distributing payments to the INFLUENCERs using this system. We expect to have this completed by April 2018.

- v1.0 PUT: PUT wallet integrated with the Robin8 Mobile App. Verification and trans- actions to be handled by Robin8's internal Zero Knowledge Proof ledger system to protect individual user anonymity from advertisers, publishers and third parties. Ad inventory will be valued, and transactions will be calculated from reported Profile Utility data. This will be released by September 2018.

- Post v1.0 PUT: Make the transfer and verification process entirely distributed on Qtum using a scheme with Zero Knowledge Proof protocol for ensuring user privacy. Add alternate metrics based on advertiser or influencer or follower feedback. This will allow for full user privacy as well as a decentralized audit trail for advertisers, Influencers, publishers and followers to ensure they received correct payments for the advertising delivered through the PUT network. The estimated release date is November 2018.
- Mobile App as platform/PUT: Further profile usage metrics based on advertiser feedback as needed. Partners building applications on the PUT infrastructure. Also, at this point we plan to explore value-added services that can be offered to consumers on the App platform through PUT. These applications will launch in 2019.

4. Business Landscape

4.1 Competition

AdMaster
AdMaster is a tech company that provides data service for brands. The company offers ad tracking, data-driven strategy optimization, and data management. It has just closed the Round B investment. The product portfolio of AdMaster includes TrackMaster, a performance evaluation tool for advertisement, and SiteMaster, a website data management platform. Most of its products offer analysis and insights for digital marketing.

Miaozhen (秒针)
Miaozhen Systems is another company that focuses on tracking and measurement of digital marketing performance. It also offers a DMP (demand side platform) for companies, integrating data and automating the marketing process.

NewRank (新榜)
As one of the leaders in the KOL market, NewRank offers KOL service, ranging from weekly rankings to KOL purchase. NewRank focuses on "Big-Vs", or internet celebrities with relatively high influence, and offers variety of service for that. NewRank's search engine is a popular tool among the media buyers, offering accurate insight for a lot of the famous social accounts. However, it offers little to smaller KOLs.

Other KOL Agencies
There are many other KOL agencies in China, offering service including selling KOL accounts to advertisers and managing business side of KOLs. Usually, each agency will have a list of KOL accounts, usually focusing on one or a few industries. Advertisers who are willing to promote through the KOLs have to go through the agencies. However, the agency model is hard to scale, and there are not any market dominant agencies emerged.

Facebook
Facebook has a variety of advertising products on their portfolio, and with their huge amount of data, they can guarantee precise targeting. However, Facebook is blocked in China so they are not a direct participant in the China KOL market.

4.2 PUT Economic Model

Block chain allows billions of Internet consumers to retain the control of their profiles and enables them to use their profile in the exchange of PUT. Unlike the current advertising landscape, where consumers' privacy is frequently violated and their profiles are used without their consent, Robin8 platform allows consumers to monetize their influence whenever they feel like they wish to share the content.

User can obtain PUTs when they share their content that is suitable to them voluntarily through the Robin8 platform. The amount that user receives, or PUTs/Post, will be based on their profile, involving both relevancy and influence.

- Relevancy: Based on the analysis of the user's historical social network data, as well as the analysis of the paid article on the platform, Robin8 will generate a "relevancy matching score" between the user and the article to be shared. User can receive more money when they share article of their expertise.
- Influence: Influence will contain mostly two areas, historical campaign performance and social network data
    - For consumers who use the platform for some time, the historical campaign performance will be used to project the performance in the next campaign. Machine learning will be used to generate the projected result.
    - For most new consumers, influence will mostly come from the social network data. User complete their profile by binding their social account to Robin8 platform, and Robin8 will obtain, store, analyze, and visualize their social network data.
- Completeness: Whenever a user binds more social profiles, they will have a higher PUT/ profile because of the completeness of their profile. This will have a diminished affect if the user binds more platforms. Binding new social platforms will always increase a user's PUT/ profile, as a user can always share through multiple social networks to generate more influence.

4.3 PUT Overview

The Profile Utility Token (PUT) was developed to address the problem created by digital activity being so large and dispersed it has caused people to lose control of their personal profile and for advertisers to receive trusted information. PUT, a token built on top of Qtum, will be the unit of exchange in a new, decentralized, open source and efficient blockchain-based digital profiling platform. In the ecosystem, advertisers will give publishers PUTs based on the measured access to data of trusted Blockchain consumers. Consumers or followers will also receive some PUTs for participating. They can donate them back to publishers or use them on the platform. This transparent system keeps user data private while delivering fewer but much more transparent and measurable social

content. Publishers experience less fraud while increasing their percentage of rewards. And advertisers get better reporting and performance. The first part of the solution, the Robin8 Mobile App, is already operational. Robin8 is a fast, privacy-focused Mobile App that anonymously measures user profile usage and the all those connected and aggregated to support advertisers and reward Influencers. The next step is introducing PUT.

Currently, we plan to utilize the Robin8 Mobile App for PUT, but other developers are free to utilize other Apps or Widgets that can be integrated into other programs.

Robin8 is more than a Mobile App and widget: it defends your data on your devices and synchronizes your personal and private browsing profile across devices using client-side encryption. Your data, studied and abstracted by either cloud based or on-device-only machine learning, provides you with private and anonymous options to get compensated for your use of your profile. Robin8 cuts out all third-party trackers and middle-players, eliminating data leakage, malware risk, and excessive fee-taking. Robin8 does this while providing influencers and publishers with a substantially larger revenue share than they are receiving in existing inefficient and opaque marketplaces.

Robin8 aims to reset the use of profiles, and starting with social advertising, change the online ad-based ecosystem, giving advertisers, publishers and consumers a win-win solution whose interrelationships can become future standards.

4.4 PUT Token Creation

Leveraging blockchain technology, Robin8 PUT presents several main advantages in contrast to many other payment systems typically used in the social media industry. Robin8 PUT is structured as a smart contract on the Qtum blockchain. Robin8 PUTs can be stored in any Qtum wallet or exchange, where they remain secured and easy to use and move from any storage system to another. Moreover, they never expire.

Robin8 PUTs can be acquired from other cryptocurrencies such as Bitcoin, or purchased with traditional currencies. They can be used completely anonymously at any Robin8 PUT online or offline reseller. Furthermore, they fully address the need for anonymity, as they can be used interchangeably in every corner of the social media industry regardless of type, region, financial payment restrictions or user identity.

In addition, Robin8 PUTs solve the common problem of chargebacks, which every online vendor in the industry faces on a regular basis. Thanks to the Qtum blockchain's decentralized ledger verification methodology, every Robin8 PUT Brand will be able to both track and verify that a payment has indeed been completed when a customer requests to pay in Robin8 PUTs. Since every payment is both verifiable and irreversible,

the online vendor can obtain assurance that they have already been paid for the service they have provided. As explained throughout this whitepaper, this solution offers major benefits for social media marketers, and will help them to reduce their operating costs and broaden the services they offer, while at the same time increasing their user database and conversion rates.

4.5 Spending Wallet

Built on the Qtum protocol, the Robin8 PUT spending wallet will be similar to an Qtum wallet, offering the user both online and offline methods of keeping Robin8 PUTs, using blockchain technology. The wallet is constructed in such a way that it can very easily receive details of a Brand's Robin8 PUT wallet, significantly simplifying transactions when customers purchase products or services from Robin8 PUT Brands, particularly in an offline environment.

4.6 Brand Wallet

A Robin8 PUT Brand wallet will be developed to be used primarily by brands and vendors supporting Robin8 PUT payments, and provide two major functions.

First, the Robin8 PUT Brand wallet can serve as a spending wallet, giving Brands the ability to store received or purchased Robin8 PUTs, either offline or online, and to create multi-signature wallets and sub-allocations.

Second, as the market continues to evolve, the Robin8 PUT Brand wallet will constantly be adapted to fit Brands' and vendors' emerging needs. This adaptation is intrinsically linked to trading products and services using Robin8 PUTs, and offers several major options

The Brand wallet will receive real time updates of Robin8 PUTs, and will notify the vendor of every incoming transaction. Using Qtum protocol and the blockchain, every transaction takes place instantly.

Using a cryptocurrency Brands will have the choice to automatically convert all received Robin8 PUTs to the currency of their choice, crypto or traditional. This offers two major advantages: first, it provides increased liquidity for the Robin8 PUT currency exchange; second, it assures the Brand assurance that the amount of Robin8 PUT invoiced will match the Brand's expected equivalent in his currency of choice, protecting him from currency risk.

Since each Robin8 PUT transaction is unique and irreversible, the Brand is protected against chargebacks, a very common type of scam in the internet commerce environment. Plus, with a printed transaction, the Brand can easily trace back the flow of any transaction flow, enabling them to provide better service to their clients.

4.7 Key Team Members

- Miranda Tan, Esq. CEO and Founder. Strong leader with deep understanding of market opportunity. Cornell University, BA, St. John Law School, JD.
- Hassan Miah, CTO and Co-Founder, builder of Media tech companies. University of Michigan, BA, Stanford University Graduate School of Business, MBA, CPA
- Jah Ying Chung, VP, Operations, Founder of HK based Launchpilots acquired by Robin8
- Lingkai Kong, Head of Engineering, Built the world's first steel industry search engine. Jiang Jong University, BS, Computer Science
- Dr. Janna Lipenkova, VP and Chief Scientist, AI engine and proprietary components. PhD University of Berlin, Chinese Linguistics and Machine Learning
- SoonKhen "SK" OwYong, VP Engineering, Co-Founder and CTO of Launchpilots. San Jose State University, BS, Business Administration, Management Information Systems

5. Token Launch

5.1 Token Launch Summary

Our goal is to raise a maximum of $20 million USD and a minimum of $5 million USD. PUTs will be based on Qtum platform with pricing in accordance with the market at the time of the ICO.

- Maximum financing: $20 million is the target maximum.
- Minimum financing: $5 million needed for an acceptable private crowdsale. If minimum is not met, all funds will be returned..
- Exchange rate: the pricing will depend on the market pricing of Qtum at time of private sale and value of PUT will be priced against Qtum exchange rate.

- Token contract address: TBD (Published through various channels 48hrs be- fore crowd sale launch date).
- Launch date and time: 8AM CN time December 5, 2017 block number to be published close to launch date
- Token launch time-frame: 30 days (based on Blocknumbers assigned).
- Token launch completion: Token launch will end when either the maximum number of PUTs are raised or target block number is reached.

5.2 Token Distribution

- Robin8 and advisors: 15.0% of max; 200 million PUT.
- Pre-sale investors = 15% of pool.
- Tokens available to public at launch: 50% of the total token pool.

5.3 User Growth Pool

User growth fund is used to incentivize consumers to participate in the PUT ecosystem.

- 20% of the token will be allocated to consumers and advertisers during the first year after the full launch of the system.
- PUT received as a reward can only be used within the PUT ecosystem for value added services.
- Unused PUT after 6 months will be sent back to the influencer growth fund which can then be used for new influencers.
- Existing Robin8 influencers can get tokens by updating their app and verifying phone number or Wechat ID.
- The token pool will double will be created once the user growth pool is exhausted. Once this pool is exhausted, no new tokens will be issued.

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5.4 Budget Allocation

- PUT Team: 50% of budget to hire engineers and data scientists. This financing allows for the rollout of the PUT solution, including the necessary adjustments to and development of the existing Robin8 App technology.
- Administration: 10% of budget Consists of PUT legal, security, accounting and other administration costs.
- Marketing: 20% of budget for expanding adoption of the Robin8 Mobile App and the PUT solution among influencers, consumers, publishers and advertisers. This also includes the growth and maintenance of the world-wide community.
- Contractors: 13% of budget These funds will be directed at third-party providers including engineering, marketing, PR, partnerships, affiliate programs and more.
- Contingency: 7% of budget This is a set-aside for unforeseen costs.

6 PUT FAQs

What does PUT stand for and what is it?
Profile Utility Token. The PUT, a token based on the Qtum technology, is a unit of exchange in a new Blockchain based digital profiling system. Personal profile usage is anonymously monitored in the Robin8 App and consumers and publishers are rewarded accordingly with PUTs. Consumers also get a share of PUTs for participating.

What do PUTs represent?
PUTs are tokens in a new Blockchain and profile-based social advertising platform. They are not refundable, nor are they securities or for speculation. There is no promise of future performance. There is no suggestion or promise that PUT has or will hold a particular value. PUTs give no rights in the company and do not represent participation in the company. PUTs are sold as a functional good. Any value received by company may be spent without conditions.

What amount is being raised? What is the cap of tokens? Will there be a follow-on offering?
We are targeting a raise of as much as $20 million USD. Yes, there is a possibility of a follow-on offering.

What crypto-currencies are accepted in the crowdsale?
ETH will be accepted in the crowdsale. You will be required to have an Qtum wallet pointed at the token/crowdsale address to participate in the crowdsale. PUT are Qtum derived

tokens. If you hold BTC or some other crypto-currency it can be exchanged for ETH and used to participate in the crowdsale.

When will the Crowdsale happen?
We are planning a Crowdsale by December 2017. A presale is planned during November 2017. Note that the PUT crowdsale parameters will be tied to blocknumber, so times will depend on Qtum mining rates.
What is the price of PUT?
PUT will be a fixed ratio to ETH. This may vary slightly with ETH volatility as we get closer to the contract deployment date. The exchange rate will be published a week before the ICO.

How will Robin8 use proceeds raised during token launch?
The proceeds in the crowdsale will be used by Robin8 Software team to build out the Blockchain-based Profile utility system, which uses PUTs as a unit of exchange.
How will Robin8 store ETH?
Robin8 will use the standard Qtum multi-signature wallet.

Are PUT tokens transferable?
Crowdsale tokens are immediately transferable. Tokens used in the App may only be donated or used to pay influencers or publishers for premium content or for other services. Tokens may also be used by publishers for promotions.