Deprecated

devnetwork

Whitepaper

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1.   Abstract

Devnetwork creates a global professional network, HR tools, community engagement, event management and large-scale professional database. Devnetwork will be built on top of the Devcamp platform[1] which lets every stakeholder in tech industries grow the ecosystem together. Professionals, companies, HRs and partners can use Devnetwork as a semi automated tool to achieve their career and business goal. Professionals can create their profile pages and search for jobs. Companies can build their identities to assert their presence on the platform, search for candidates and hire them once the matches are found. Developer groups can grow their communities, organize free and paid events. Profile owners on the platform can opt in for complete privacy, in which case there will be no means provided by the platform (free nor paid) for others to acquire the contact information of the profile owner. Devnetwork Token (DEV), will be issued as the medium of exchange on the platform. DEV can be used to purchase geek gadget or paid subscription, to pay for the opportunity to connect and engage with job candidates, to hire freelancers or outsource software projects, to acquire early-bird tickets and attend exclusive programs. To give back to the community, token holders will be randomly selected at the end of every month and be rewarded 30% of the tokens Devcamp has earned during the past month. The chance each token holding account gets the reward is proportional to the amount of tokens held on the account relative to the total token supply. Together with the ability to scale the platform exponentially on our network, DEV token holders and stakeholders will gain direct benefits significantly. With our roadmap of community driven strategy, leveraging the blockchain, we are creating a whole circle that enables billions of jobs in every part of the world for everyone including workers in developing regions and make the hiring process more accessible and engaging by replacing traditional HR tools and headhunting culture.

2.   Introduction

Professional talent is a top priority for every organization. Despite the advance in robotics and information technology and the ubiquity of affordable computing hardware which lead to The Fourth Industrial Revolution[2], they had created talent shortage and the world does not have enough talented developers to serve every large-scale unicorn or small startup, especially in the technology sector where the lack of talent supply is more than 40% and in the fintech and Blockchain industry where more than 70% of the employers are having trouble filling the positions[3]. We hope to create a long term sustainable solution to mitigate the problem of world's technological ecosystem.

1. First things first, we need to disrupt HR industries by creating platforms and tools

that do not rely on headhunting agencies - the middlemen who earn big hiring fees from our ecosystem, the fees that companies have to pay sophisticated headhunter can be given back to workers in term of better benefits and community support as contributions and sponsorships. Devnetwork is designed to solve this problem, make the price discovery of the tech talent market as efficient as possible and help grow the ecosystem on Devcamp platform. Companies that on board with us will be a part of the community, receive good reputation and retain valuable professionals by giving them opportunities to work on things that matter and give back to the community. Remember you didn't pick talent, top talent chooses to work with you.

2. Create a sustainable platform. We do not intent to create a job platform to which candidates only come when they are looking to fulfil their career and also HRs only come when they want to hire. Devcamp is the backbone of Devnetwork, we aim to build a global platform that can grow rapidly with collaborations from every stakeholder, talents share their knowledge to communities, communities open for everyone to open the possibility to grow the ecosystem with support from companies. Companies lead the industries and create innovations from team of professionals and talents. These component together help create a full-circle on our platform, we do not create only tools or products, we grow communities and build the ecosystem with partners.

3. Accelerate the ecosystem. Every important journey needs catalysts to make it extraordinary. By expanding Devnetwork and Devcamp globally, we will not work on our own like a giant central bureau. We have to work closely with local communities and partners in every part of the world. Most of our core team members are from Thailand and Asian countries where we are experts at developing our emerging markets. We have been working closely with the ecosystem for several years, gaining lots of experience and connections with stakeholders. We understand the problem that tech ecosystems need help and support. We see great potential in this investment whose return for us and the ecosystem can be exponential. That is why we will reserve part of the funding to create grant funds separately and especially for emerging markets and specific endangered sectors in tech industries. Our funding support will helps communities and talents in emerging market and rural area in many ways i.e. subsidiary cost of hiring fee, supporting local communities events in fun ways, driving innovation and creating more talents. Country by country, brick by brick and we can cover the entire regions.

3.   Market Analysis

If you combine the GDP from every country, you will get the total number called the Gross World Product (GWP) which is the total value of products and services by companies

around the world. In 2016, GWP reach $75 trillion in 2016 and East Asia and the Pacific Region alone generate more GDP combined than other parts of the world. Only Fortune 500 create $27.7 trillion in revenues but more than 20% of them fell from the list even they were listed since 1955, this refer to the new waves companies that was disrupted because they cannot align technologies with their business approach. For upcoming year, more than 60% of HR and executives say they need to increase their talent and 80% see that talents is the number one priority. Talent management and HRs are the main teams that help companies reshape and transform business to the new digital era, overall HR industries will reach 600 billion in 2018 with the average cost per recruitment commission of around 30,000$.

In the United States, average cost per employee including salary, perks and benefits can be $55,000 - $80,000 and it was included HR budget vary around $2500 - $5000 which in return generates $500,000 average revenue per employee. In Asia and new emerging markets, the cost per employee are lower than that in the US. but can generate the same rate of return for international companies. So investing talents in new emerging market can diversified team and cultures, generate more revenue return and right move for every international organizations. Going global isn't easy deal for holding company, penetration and blend into local community and economic will be challenging too.

3.1. Problems

We need more tech talent in tech industries. The people in the industry is well aware of the fact and this is strongly confirmed among the press [4][5][6][7][8]. If we cannot keep up and produce more tech talents, the shortage would only exacerbate.

There is another problem which is as important as talent shortage, employers don't understand new technology. Some of them are traditional conglomerates, non-tech startups or traditional tech companies. Many employers do not understand the nature of information workers. They do not understand that creative and intellectual labor needs to be tackled from a different mindset. Traditional HR team don't understand technology and new skill set talents need in 2020. If the HR which is the backbone of a company has problems, they will get bad hires. Additionally, bad hires may cause worse problems than not hiring at all. This leads to unrealistic deadlines and budget and eventually the failure of the employers in question to keep tech talents with them. According to the U.S. Department of Labor, the price of a bad hire is at least 30 percent of the employee's first-year earnings[9,10]. This kind of situation also rings true in many organizations in the SEA region and worldwide.

3.2. Our Solution

There are three approaches we can employ in order to mitigate the problem and make it long term sustainable to world tech ecosystem as described on the introduction.

- Economic - Improve hiring concept and cost : Enabling blockchain technology to the industry, creating the tools for HR and platform for professionals, changing the ways of hiring to support new generation's career, removing middlemen and traditional HR agency area from the ecosystem, making the price discovery of the tech talent market as efficient as possible. So the capable talents are well paid and more talents are attracted to enter the field.

- Educate - Increase the quality supply : Engaging talents and stakeholders with our platform, make education more accessible to the people, offer more events and courses to produce more quality tech workers with less time spending.

- Empower - Unite global communities : Forwarding worldwide tech talent to meet new development and global business, investing in new emerging market and accelerating new innovation that create new industries and works.

This imbalance of demand and supply naturally drives the wage up[6]. This is good news for tech industries. More companies are willing to compete and pay more to attract top talents. It is natural for employees to change jobs more frequently than those in other fields. While this automatic price discovery is already happening and is arguably healthy for the talented, we still believe it still needs to be improved, can be improved, and must be improved as quickly as possible. The earlier the true value of the need in each specialty can be better determined, the industry and the economy as a whole can make decisions on how much to invest in producing more competent tech workers, and an appropriate amount of resource (which the author believe we need more rather than less) is allocated to the problem, the better talented people gets attracted to the field and its education to produce more workforce required. We plan to focus on the first approach and hope that with more resources and attentions brought to it. The society will be able to execute the second approach better.

In this paper we introduce our Devnetwork tokens, which will be oftentimes be referred to as DEV for brevity. DEV runs on Ethereum, the most widely trusted blockchain of its kind to date, Turing equivalent and stateful "smart contract" code can be deployed and run on it. Similarly to how we trust Bitcoin that transactions that appear on-chain will never change, with ethereum, we trust that smart contracts deployed to the chain is immutable

and will always run honestly as expected. As will be presented in details later in this paper, we can designed a trustless escrow mechanism that can be used along with DEV to build an economy of decentralized network of talents and companies. We can create job boards along with an efficient incentive scheme for members of the community from anywhere in the world to participate and get rewarded in DEV.

4. Devnetwork, Devcamp and DEV tokens

Through Devcamp, our existing platform, we aim to start from creating the biggest community of global tech professional and software sourcing marketplace to foster the economy and enable blockchain technology together with Devnetwork and DEV token, we can create thousands of possible ways to grow and engage community, not only hiring and matching. Think about WWW, HTML, API and OS platform, Devnetwork can be technology medium for every platform not only Devcamp. It's open and everyone can access and build things on top of it. Companies, communities, freelancers, game publisher and even college students. Our solutions will be effective but simple and represent our core value that unite everyone in the industries. In the near future when we and partners work together, the solution can be develop and increasing in many ways. Also, we will update it regularly on Devnetwork website's case study. Here is the early solution we would like to share and open for everyone to join and onboard the platform with us in this decade.

4.1. Devnetwork - Decentralized Hiring and Matching Tools

Traditional hiring and matching candidate, freelancer and software outsourcing are centralized which lack of transparency. Companies and HRs want to get the right candidates and sourcing but they get bad hire from false information. Candidates send their information to hiring pools without even know their personal data viewed and transferred to many agencies.

Devnetwork will change the entire HR and procurement industries, improving transparency and generate low friction from entire regions. Users can trust the code, not any agency. The platform is based on public blockchain which makes it censorship-resistant, controlled by smart contracts deployed on the blockchain. Moreover, running the platform on Ethereum makes the entire process open and transparent. All disputes will be resolved by the Devcamp platform based on the rules laid down in the smart contracts.

The smart contract for DEV token is always there on the Ethereum blockchain. Every hiring and matching activity securely store on Devnetwork blockchain, everyone can access

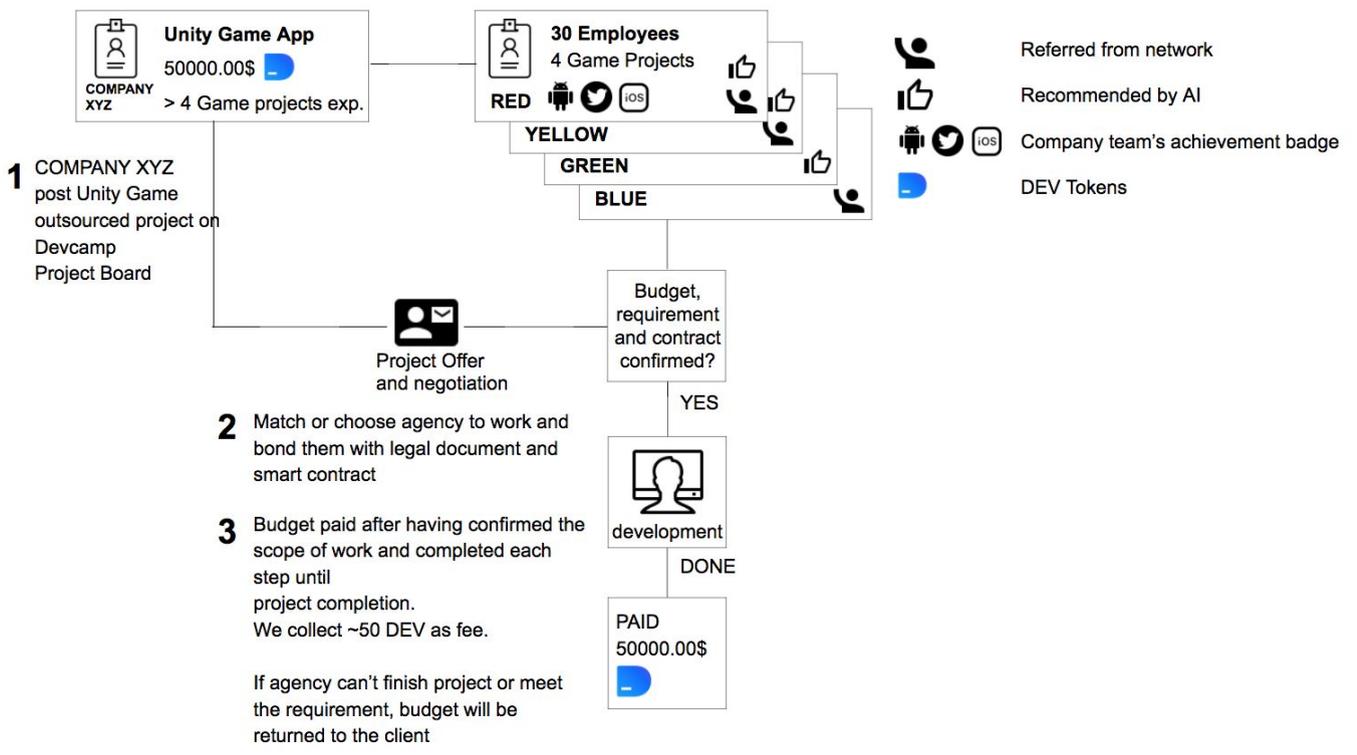it at same level and paid small matching and hiring fee at the same rate. If you are small business or startup, you can get powerful tools as big companies. If you are one of the Fortune 500 companies, you don't have to pay any extra fees upfront to access the service. Devnetwork tools make everyone accessible and also give benefits back to all stakeholders. When corporate make hiring, they need to paid fee directly to hiring agency and the agency is only one who get main benefit from the process.

On Devnetwork we received fee from corporate and it also paid to network of candidate as a referral too. DEV token holders, related communities and previous corporate who lost the candidates will get chance of random benefits or grants from Devnetwork and grant pool, this encourages every stakeholders to onboard our platform. Lastly each corporate can draft a unique contract to each hire to add incentive for them as a perks, benefits or salary through DEV token.

4.1.1. Devnetwork Job diagram

1 COMPANY XYZ posts iOS developer job on Devcamp

2 Having found a good match on Devnetwork, XYZ pays a small fee to **unlock** profile and schedule interview

3 After Interviewing process, XYZ sends feedback to Devnetwork. Candidate gets job after hiring process.

Referred from network
Recommended by AI
Achievement badge
DEV Tokens
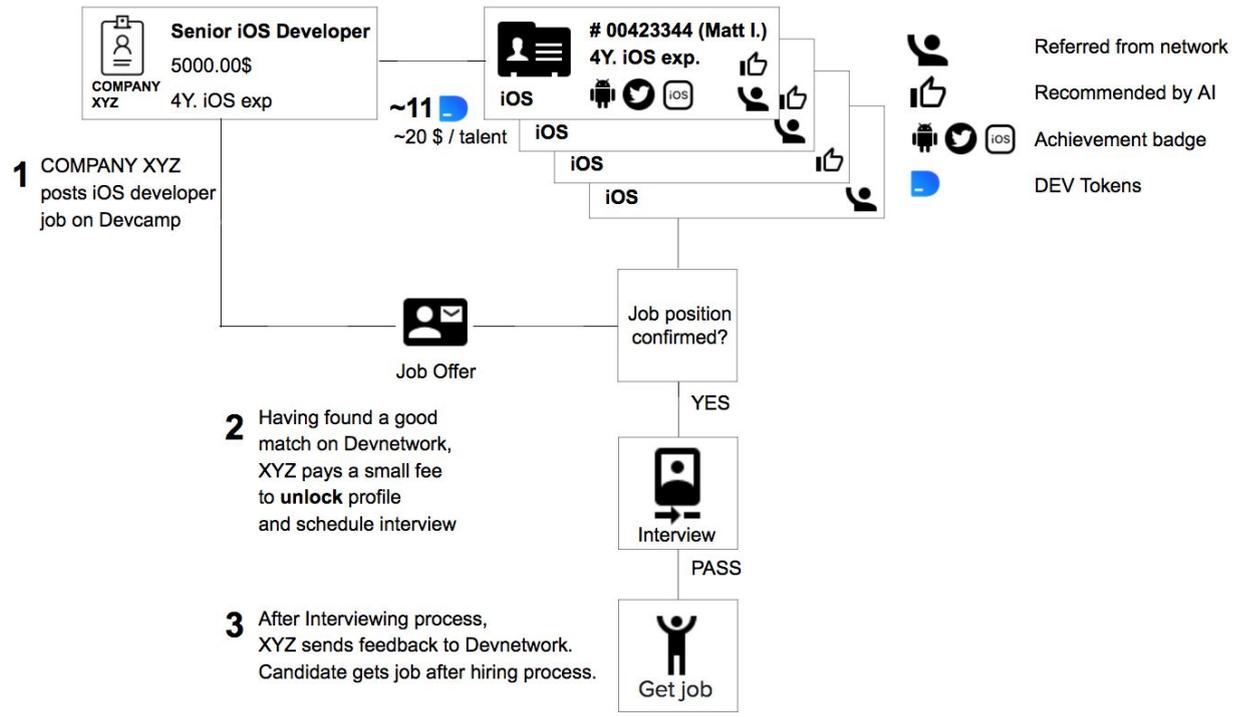
4.1.2. Devnetwork Project diagram

1 COMPANY XYZ post Unity Game outsourced project on Devcamp Project Board

2 Match or choose agency to work and bond them with legal document and smart contract

3 Budget paid after having confirmed the scope of work and completed each step until project completion.
We collect ~50 DEV as fee.

If agency can't finish project or meet the requirement, budget will be returned to the client

Referred from network
Recommended by AI
Company team's achievement badge
DEV Tokens

4.2. Devcamp - Global Ecosystem Platform

Devcamp, our existing platform, was created to empower the tech ecosystem, raise awareness and deliver talent needs. We work closely with tech company like Google, Samsung, telcos, banks and more to create ecosystem in Thailand From online platform to on-ground engagement. We build the whole circle for professionals, tech companies and communities with ability to display talent profile, corporate profile, job board, project board and tools for community manager.

The platform has a friendly and easy-to-use interface for corporates and talents to help post their requirements with ease. Talents can upload their profile and work, Corporates can unlock them to get direct connect with small amount of fee. To ensure the authenticity of the users, the platform will be performing identity verifications whenever necessary. The unique identities of talents and corporates will be based on their addresses in the blockchain, making it difficult to forge. When a contract is awarded by the corporates, they need to deposit platform fee which is paid in the DEV tokens. The platform will utilize smart contracts and escrow mechanism to hold the fee and perform disbursement of the collected funds. Corporates tribunal is created which decides on the disputes between professionals and corporates.

4.2.1. Devcamp Corporate profile and HR tools

We made the new way for corporates to connect to professionals. Devcamp Corporates profile will show the best of each company technical team and career. Exclusive access to the tools we tailor-made for HR function, hire the right people, easy to setup and direct to talent. Free for casual and Devnetwork paid package with intensive tools for smart company and its HR team. No more head hunter and awkward approach to the candidate.

4.2.2. Devcamp Professional profile

Professional can create their own work profile, highlight their own projects and codes. We support talent by help them learn from resource materials, get special invitation from our community partners, choose new career path or work on sourcing project from agency. The profile will securely store on Devnetwork blockchain.

4.2.3. Devcamp Community profile and event tools

From groups of people who interested in tech topic to technology provider, gather in one place with top notch tools designed for community managers for all scales and event types i.e. event management, community membership, hackathon and paid event using DEV tokens. It's free and always free for every communities. Engage right audience with hassle free.

4.2.4. Devcamp Project sourcing

Project sourcing board will allow anyone to post and search agency or freelance to get job done with guarantee project completion on Devnetwork smart contract. You will have choices to paid when the job done and paid small amount of fee via DEV tokens. This will make improvement of project sourcing market with blockchain technology.

4.2.5. Devcamp AI

Our researcher and machine learning team will create automated tools which can recommend and candidate and agency to corporate, recommend salary guide to make sure corporates won't paid more or less than usual, identify new rising star talent or specific new work trend that may be needed in future. Tailor the best for HR and corporate to select right candidates, decrease bad hires and make every DEV tokens worth in every spend.

4.2.6. Devcamp Blog and Materials

Our blog site will be value added to community and corporate who onboard with us. We will update news and useful resource and also help highlight corporates and partner's activity on our network. We have team of experts and evangelists who also publish article and content on the site regularly. We will also collect resource materials like recording session videos, presentation slides and more materials from both communities and experts. We will also working with our partner like Skooldio and YouTube to help educate new technology area.

4.3. DEV - Utility token and Cryptocurrency

More than 95% of cryptocurrency volume was traded and happened on crypto exchange market. Many major institutions and shops now accepting Bitcoin but it still low compared to the growth of cryptocurrency market capitalization which reach 300 Billions and only 1 Billions use for trade for physical and consumer asset.

DEV is the native token of Devnetwork and its platform. Everyone can easily transfer DEV token in return of purchasing services or products between DEV wallet with small fee in an instant transaction. We will working closely with Devcamp and Devnetwork partners and corporate to implement set of products and services that can be purchased by DEV token i.e. products and services subscription, in-app and in-game item, gadget and phone, fitness and spa, conference tickets and community donation. It will increase value of Devnetwork and our partner products and innovations too.

There is an inherent utility of these tokens for anyone who wants to interact with users on the Devcamp platform. As the professional platform becomes popular among the market and ecosystem, there will be a demand for more Devcamp tokens which would increase its value for the existing token holders.

4.4. Platform Enhancement and plugin

We develop creative and fun ways to implement DEV token as a plugin on other platforms beside Devcamp. Each partner can use our plugin and template like bug bounty, random and lotto, hackathon and challenge, bug bounty and more to create interactive micro campaign with their products. It has less requirements and everyone can plug in with us and use DEV token as a medium to perform the activities.

5. Devnetwork Community Grant

In order to give back to the community, 30% of the DEV that the platform earns each calendar month will be rewarded to randomly selected token holders[1] at the end of the month. The chance each token holding address will receive the reward is proportional to the average amount of token held in the account during the month. Since the Ethereum blockchain does not have a native concept of date and time, we eventually translate the start and the end of each month into block heights.

To define the chance mentioned above for each token holding address formally, we first define μ_a, the mean amount of token held by address a between block b_1 and b_2 as

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[1] Depending on the Ethereum gas price and the amount of DEV the platform has received each month, the number of recipients and the amount of each reward will be announced later.

$$\mu_a = \frac{\sum_{b=b_1}^{b=b_2} A(a,b)}{b_2 - b_1 + 1}$$

where $A(a,k)$ is the amount of token held at address a at block height k. Then the probability that an address a among the the addresses $a_1 \ldots a_N$ will win a reward is

$$\frac{\mu_a}{\sum_{k=1}^{k=N} \mu_{a_k}}$$

6. Devnetwork Token as a Payment Method

Devnetwork offers a secure from of payment which protects the interests of all the parties involved. From hiring, outsourcing software development or any transaction on Devnetwork, once a service charge is agreed upon by a corporate, it is deposited by the corporates in our escrow system. When the service is released on successful completion of the transaction, the amount will be released to appropriate recipients.

One important advantage of having a crypto token as the exchange medium is that we can implement trustless escrow setups. They can be useful in various situations when DEV is promised to be sent from one party to another in exchange for products, services, assets, or any imaginable entities. Relevant uses of escrows on Devnetwork can be, for example, a corporate promising to pay a prospective employee in DEV for an interview in compensation for his time, a bug bounty program promising DEV in reward for the first participant who can fix a software bug.

6.1 The Escrow Mechanism

We begin by discussing an implementation of the widely used basic escrow mechanism and its shortcoming, followed by our proposed mechanism which is more robust in the sense that the chance of any dispute that needs to be resolved outside the system is reduced.

In both depictions of the escrow mechanisms, let us suppose there are two parties involved, namely Alice the <u>a</u>pplication developer and Bob the <u>b</u>usiness owner. Bob wants Alice to give him a demo mobile application and in return he promises to give Alice p DEV in her account a.
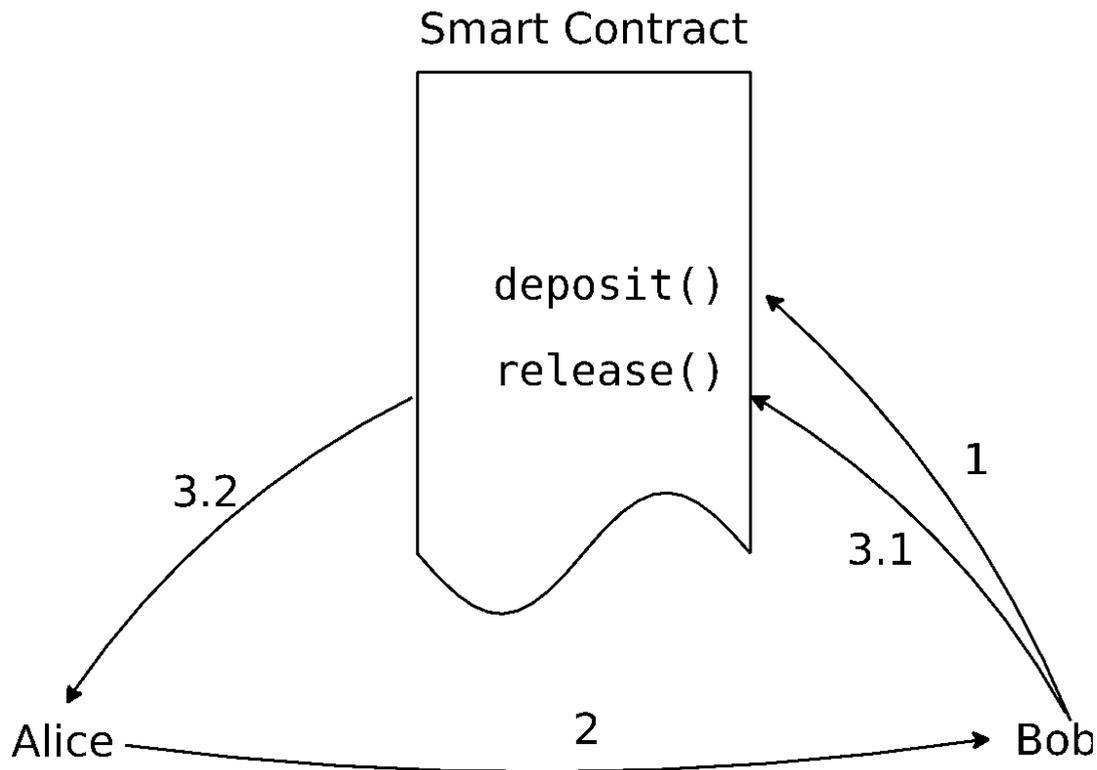
6.1.1 The Basic Escrow Mechanism

Figure 1: A diagram depicting the chain of events of the best case scenario for the basic escrow mechanism. Each arrow in the diagram is an event numerically labeled according to its order of occurrence in time.

In the basic escrow mechanism, the chain of events for best case scenario is described as follows:

1. Bob requests for a product/service from Alice and execute in the smart contract, `deposit(p, a)` to lock p DEV in the smart contract and promise that the fund can only be sent to account a when unlocked. In return he gets the transaction id as the return value, which Bob sends to Alice in order to verify. After this step only Bob can unlock the fund and the fund cannot be sent to any other account but a.

2. Having checked that the deposit transaction with the given id is there, Alice sends Bob the product/service.

3. Upon receiving the product/service:
   3.1. Bob executes `release(id)`

3.2. The smart contract sends p DEV to Alice

As long as both parties honestly act according to the protocol, they can transact on their own without any trusted third party. However, consider the case when Alice does not deliver the product/service as promise at Step 2 because someone else offered her a better deal for the same amount of effort shortly after Bob did. The only way Bob can get the fund back is to ask Alice to return the fund back to him after he has executed the contract to release the fund to her. On the other hand at Step 3 when Bob has received Alice's good/service he may not release the fund to her to save the contract execution fee, or perhaps just because he can export more product/service or assets from Alice this way. As a workaround for Alice's potential dishonesty in Step 2, we may add an expiry condition that lets Bob refund himself after a certain period of time but that change to the escrow mechanism also introduces the possibility that Bob, after having Alice's product/service, may just let the fund stay in the contract and wait until the expiry and refund the tokens back to himself.
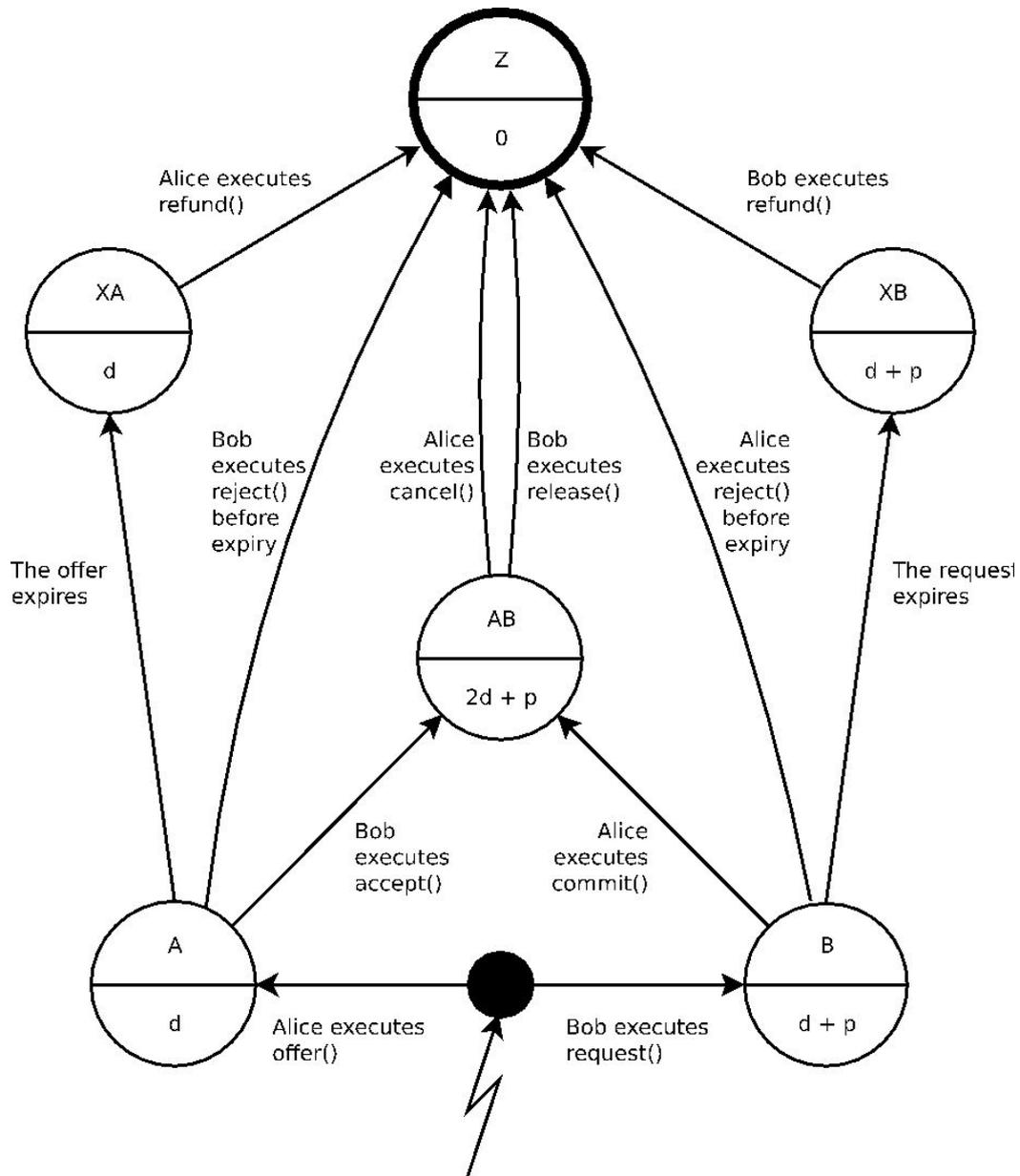
6.1.2 A More Robust Escrow Mechanism

Figure 2: The finite state machine depicting the escrow mechanism we propose. The solid black dot is the starting state and the top most circle with thick border is the terminal state. The top half of each state is its name and the bottom half is the amount of DEV locked inside the contract at that particular state. Informally we can think of time as going up, states higher in the diagram happen after those below them.

We can reduce the chance that any of the parties will act dishonestly, thus effectively reduce the chance of disputes that need to be settled outside the system. By having both parties commit their DEV in the early stages, they openly show the other party

that are willing to complete the transaction and they both have the economic incentive to do so.

This improved mechanism is best described as a finite state machine in Figure 2. A transaction always start from the initial state at the bottom and completes at the topmost state at the top. We first explain what each of the five remaining states in the FSM one by one followed by the descriptions for the eight state transition functions and end by an example of a complete chain of events that constitutes a complete transaction. Note that d is the deposit amount of DEV both parties agree to have locked inside the contract until the transaction completes and Alice and Bob agree that p DEV is the price exchangeable with the product/service offered by Alice.

A: The contract is in this state if Alice is the first party who starts the transaction. She does so by executing at the initial state,

<div align="center">

`offer(d, p, e)`

</div>

where e is the expiry time which will be set to a block number. Upon execution of this function, the contract deducts d DEV from Alice's account, stores p as the amount Bob needs to send in order to transact, and stores e as the reference block number after which the contract automatically reaches state XA if Bob does not respond in time.

XA: The contract automatically reaches this state if Bob has failed to execute `accept()` or `reject()` before the expiry block e. At this point only Alice can execute `refund()` to get back her d DEV of deposit.

B: From the initial state, Bob can also be the one who start the transaction. He does so by executing,

<div align="center">

`request(d, p, e)`

</div>

whese e is , again, the expiry block number. Upon executing of this function, the contract deducts $d + p$ DEV from Bob's account and stores e as the reference block number after which the contract automatically reaches state XB if Alice does not respond in time.

XB: The contract automatically reaches this state if Alice has failed to execute `commit()` or `reject()` before the expiry block e. At this point only Bob can execute `refund()` to reclaim the $d + p$ DEV previously locked inside the contract.

AB: This is the state where both Alice and Bob have their funds locked inside the contract. After Bob has received the product/service he can execute `release()` to have the contract send Alice $d + p$ and himself d. Without the execution fees, at this point Bob's net expense is p and Alice's 0. On the other hand, If Alice cannot deliver the product/service then she can execute `cancel()` and the appropriate amounts of DEV are returned back to herself and Bob by the smart contract.

We now explain the state transition functions and their arguments in detail.

`offer(d, p, e)`: This function can only be executed at the initial state by Alice to transition the contract to State A. d DEV is deducted from Alice's account and the value d and p are stored in the contract and $d + p$ DEV will be deducted from Bob's account if he responds by executing `accept()`. e is the expiry block number as described above for State A.

`accept()`: This function can only be executed at State A by Bob to transition the contract to State AB. By executing this function, Bob accepts Alice's offer of product/service and agrees to have $d + p$ locked inside the contract, to be released by him once he has received the product/service.

`request(d, p, e)`: This function can only be executed at the initial state by Bob to transition the contract to State B. $d + p$ DEV is deducted from Bob's account and the value d and p are stored in the contract and d will be deducted from Alice's account if she responds by executing `commit()`. e is the expiry block number as described above for State B.

`commit()`: This function can only be executed at State B by Alice to transition the contract to State AB. By executing this function, Alice honors Bob's request and agree to lock d DEV from her account inside the contract to show the commitment that she will deliver the product/service.

`release()`: This function can only be executed by Bob at State AB. He would want to do this once he is satisfied with the product/service delivered. He is compelled to do so because he has $d + p$ DEV locked inside the contract while the price he is happy to exchange for Alice's product/service is p. Upon execution, the function sends d DEV back to Bob's account and sends $d + p$ to Alice.

`cancel()`: This function can only be executed by Alice at State AB. Upon execution, the function sends d DEV back to Alice and $d + p$ back to Bob. Alice might want to execute this function if, for example, her product was lost before she could deliver it to Bob or if the price p for the product/service has to be abruptly changed.

`refund()`: This function can be executed at State XA or XB by Alice or Bob, respectively. Note that the contract reaches State XA or XB when the offer or request has expired. When Alice executes it she has d DEV returned to her by the contract. When Bob executes it he has $d + p$ DEV returned to him by the contract.

`reject()`: This function can be executed at State A or B by Bob or Alice, respectively. When Alice executes it Bob has $d + p$ DEV returned to him by the contract. When Bob executes it Alice has d DEV returned to her by the contract.

Suppose for example that Bob agrees to buy a software license key from Alice for 10 DEV with the commitment deposit of 5 DEV and the blockchain is currently at block 1000000, the following chain of events might happen:

- Bob executes `request(d=5, p=10, e=1000005)` and the contract deducts 15 DEV from his account.
- Alice executes `commit()` at block 1000001 and the contract deducts 5 DEV from her account.
- Alice sends bob the license key via email.
- Having received the key and tested that it is valid, Bob executes `release()`. The contract sends Bob 5 DEV and Alice 15 DEV.

Note that although d is arbitrary in this scenario, an economically sensible choice of d should be worth more than the contract execution fee, otherwise one party may not be economically compelled to complete the transaction, for example consider the case when Bob and Alice have executed `request()` and `commit()` respectively and for some unexpected reason Alice cannot deliver the product/service as promised and d is set very low that it is not worth executing the contract to get the amount back (and in the process return $d + p$ to Bob) then a selfish Alice may just leave the contract in state AB. Given the possibility in the near future that Alice or Bob can be software or robot agents programmed to maximize simple economic incentives, a careful choice of d is always better. The bigger the value d, the more compelled both parties are to complete the transaction. As d is returned to both parties in the end and the execution fee does not depend on it, one can set it bigger than p if desired and the net settlement is still effectively p in exchange for the product/service. If both parties plan to have a long transactional relationship between each other they may set d to a very high value for their first few transactions and once they are certain of each other's reliability they can reduce the value of d later.

Note also that there is no economic incentives for Alice nor Bob to execute `reject()` to have the contract return the fund to the other party so a sensible choice of the expiry block e is highly advised. The function is added for completeness under the assumption that both parties may be externally compelled to executed it.

7. Devnetwork Community Fund

We reserve 8% from ICO budget to make community fund by exchange budget to Bitcoin, Ethereum, Litecoin, OmiseGO, Stella Lumens, Ripples and more. Our fund manager who have CFA qualification will manage the fund by swapping the coins and trade it

regularly on general fund management protocol, we won't sell the coin to fiat currency and use it as our team budget. We will try to keep the asset as long as possible and spend only few from profit to support ecosystem in emerging market and new technology research and implementation like Devconn and local community support. DEV tokens holder, investor and Devcamp team won't get any benefits and dividend direct from this fund. This fund create to help solve problem using Devcamp platform for the countries and communities where it needed. Investors and every stakeholders will get indirect benefits from value of Devcamp platform and DEV token influences.

8.   Limitation or challenge

Cryptography rely on private security key and protocol which has nearly 99.99% success rate of secure implementation. However, in the near future, when one could perform huge computing resources in an instant, then private security key could break. Quantum computing can be the threat to cryptocurrency, some cryptographic system already has a new set of rule to prevent it. Still, there will be more new technology in the future that can take advantage of older technology. Technology has come and gone, that is why we put Research & Development budget as our first priority.

9.   Open-Source license

We will maintain Devcamp platform ourselves, but as an open-source environment, we are highly interested in any stakeholders and partners that would help developing an ecosystem, where only price plays role and diversity of apps is only adding value to the network itself.On the internet, there would be no governmental requirements for the hire-on-demand. These mean, Devcamp helps corporates to hire more talents and talents will get more job and more value added service for smaller fees from the corporates. Devcamp code, apps and API's will be open-sourced, with presence in the Apple App store, Google Play store and on related web portals. Communities or corporates can integrate software into Devnetwork and its infrastructure, expanding number of users and developing capitalization of Devcamp. No upfront cost and cost of implementation on Devcamp policy is making it even more interesting for end users, talents and corporates.

10.   Conclusion

Platform and community are building on trust. We create system of trust using blockchain technology, not trust from individual or institution. Every DEV tokens represent

transparency and decentralized network that can create thousand of possibility. Everyone onboarding the platform have equal power to change the industries.

We believe communities and partners are the core of our project, not the platform. In the era which technology evolve on nearly same growth as Moore's laws, ethics and responsible are still far behind. Fake news, fraud and false statement are everywhere, including blockchain industries. Therefore, we need to work together on the same side, driving communities in better direction and make statement of trust to help solve the problem.

We are the team who initiate the project, building platform but it was owned by everyone. It's free and open, we want to create path that enabling the use of technology, educate hundred millions of the next generation, provide jobs and foster ecosystem and innovation. Blockchain was invented for great purpose, not profit, the same as our Devnetwork project.

11. Future Work

Devnetwork will be in Devcamp Release 2.0 which is already budgeted and we will launching before May 2018. From the crowdfunding, we plan to invest 23.2% in future development of Devcamp and our partner platform in 2018.

Our current focus is on creating an efficient recruitment platform for talents. Once we are successful in this, we plan to venture into tech startup, tech learning course online and tech events. We believe that the ventures can be achieved in a more efficient way over blockchain and through an Ethereum based platform.

12. Team and Background

We believe tech workers are the key people that can make the world better, disrupt and change the status quo of the world's business and innovation. Starting from years of experience in being a big part of the Google Developer's partners and organizing events for the tech and startup communities in Thailand, we built a platform that aims to reach out to as many tech experts in the country as possible, make it easy for them to make themselves known in the industry and make it convenient for corporates in need of tech talents to reach out to them. The result is Devcamp Platform and the story of our founder team.

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