BLUE WHALE NETWORK

- WHITE PAPER -

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Abstract

Against the backdrop of technological disruption and offshoring, the "gig/sharing economy" is globally burgeoning. Freelancers will make up a whopping 58% of the US workforce by 2027[1]. Consequently, peer-to-peer booking platforms like AirBnB and Uber have seen a meteoric rise in demand accompanying these shifts in the job market.

However, the growing dominance of these tech giants has a dark side for workers in the gig/sharing economy. None of the service providers who depend on these platforms to make a living are actual employees of these tech giants. Legally hired as "contractors"; they suffer from three main problems: 1) High Commission Fees; 2) Exorbitant Marketing and Advertising Costs; and 3) a Lack of Security that inhibits them from becoming successful small business owners.

The Blue Whale Foundation's ICO is set to rock the boat of the gig/sharing economy by leveraging on blockchain as a decentralized ledger to cut out the tech giants who are currently the largest middlemen between freelancers and their customers.

Overview

The surge in the size and growth rate of the gig economy has led to the atmospheric rise of new platforms such as AirBnB and Uber. However, workers who supply these services and consumers who use these services, have not benefited fairly from the gig/sharing economy.

As the definition of work changes and evolves, the difficulties encountered by freelancers and part-time workers such as the lack of protection, and the insecurity of self-employment will only worsen[2]. This not only affects the growing mass of freelancers, but also ruptures the social contract between workers and governments. Consumer protections have also weakened in view of the murky legal relationship

[1] Mbopartners.com. (2016). *Predictions for the Future of Independent Work | MBO Partners*. [online] Available at: http://info.mbopartners.com/rs/mbo/images/Whitepaper_FutureTrends.pdf [Accessed 5 Feb. 2018].

[2] Popper, B. (2015). *Today's ruling that drivers are employees could cripple Uber's business*. [online] The Verge. Available at: https://www.theverge.com/2015/6/17/8797021/uber-california-lawsuit-labor-employee-contractor [Accessed 5 Feb. 2018].

between freelancers and their host platforms. This simmering dissatisfaction has created popular backlash, as concerned governments in several countries have begun to crack down on platforms like Uber[3] and AirBnB[4]. Despite these worrying trends, no workable remedy has been proposed - until now.

The Blue Whale Foundation's blockchain-based WORK System of smart contracts is the only solution on the market designed to alleviate not only the financial and the legal problems with the "gig economy", but also the looming concentration of power in the hands of a few tech giants.

Worker's Problems	Blue Whale's WORK System
● High Commission Rates	● Contribution Activity Manager (CAM)
● Expensive Marketing and Advertising Costs	● Decentralized Associated Network (DAN)
● Lack of Security	● Reward Bank

Table 1. Blue Whale's Problem-Solution Fit

Blue Whale's WORK (Worker Optimized Reward Keeper) system consists of three main components:

Contribution Activity Manager. This keeps track of, and rewards individuals who help to drive traffic to freelancers and small businesses, turning everyone into a potential advertiser which in turns reduce the high commission rates of centralized ad platforms.

Decentralized Associated Network. In order to build the network, we provide free tools such as booking software, customer relationship management (CRM) tools, and intelligent advertising solutions. These tools drastically reduce the need for freelancers and small businesses to spend exorbitant sums to stand out through paid ads, and

[3] Fortune. (2018). Uber Service Is Being Suspended in Yet Another Country. [online] Available at: http://fortune.com/2017/08/14/uber-suspended-philippines/ [Accessed 5 Feb. 2018].

[4] Meyer, D. (2017). France Is Gearing Up For an Airbnb Tax Crackdown. [online] Fortune. Available at: http://fortune.com/2017/08/10/france-airbnb-tax-crackdown/ [Accessed 5 Feb. 2018].

search engine optimization (SEO). The decentralized network creates a new revenue model based around an advertising network constantly being refined by a cycle of consumer data mining and machine learning. This takes the power of data analytics traditionally held behind closed doors by companies like Google and Facebook, redistributing those insights and rewards evenly throughout the ecosystem of freelancers, small businesses, and consumers.

Reward Bank. The bank receives and disburses the Blue Whale eXchange (BWX) coins as the currency of this network. This balances the payouts to contributors by the contribution activity manager, and the revenues generated by the decentralized associated network. The use of blockchain technology allows for the transparent and trustworthy distribution of the BWX coins.

Problem

Freelancers and SME (small and medium-sized enterprises) owners face three main problems while providing their goods and services.

- High Commission Rates
- Expensive Marketing and Advertising Costs
- Lack of Security: Retirement Plan, Unemployment Benefit, and Paid Time-Off

High Commission Rates

Most centralized gig/sharing economy platforms take between 20% - 50% in commissions from each transaction. Despite an advertised 25% commission per ride, booking platforms Uber and Lyft charge real, effective commission rates of up to 42.75% after deducting booking fees.

Company Name	Commission Rate
Uber	25% - 42.75%
TaskRabbit	30%
Upwork	12.75% - 22.75%

Fiverr	22.9%
Groupon	More than 50%

Table 2. Commission Rate Comparison Chart

Expensive Marketing and Advertising Costs

Freelancers stick with existing centralized platforms despite the exorbitant commissions because these platforms act as information aggregators. They reduce the search costs for prospective customers by gathering them all in one platform, with a common interface and standardized interactions.

The costs of advertising on Google and Facebook are prohibitively expensive for freelancers and SME owners.

Platform	Average Cost-Per-Click (CPC)
● Facebook Ad	● **$1.72**
● Google Adwords	● **$2.32**
Platform	**Average Cost-Per-Action (CPA)**
● Facebook Ad	● **$18.68**
● Google AdWords	● **$59.18**

*Table 3. Average Cost-Per-*Click*/Action*

The average small business using Google AdWords spends between **$9,000** and **$10,000 per month** and **$100,000 to $120,000 per year** on their online advertising campaigns alone.

Lack of Security: No Employment Benefits

Existing sharing economy platforms do not offer any employment benefits, making freelance work highly precarious for independent contractors. The Blue Whale Foundation aims to change that for the better.

	Sharing Economy Platforms	Blue Whale
Retirement Plan	X	O
Paid Time-Off	X	O
Unemployment Benefit	X	O
Health Benefit	X	TBA
Medical Benefit	X	TBA

Table 4. Competitive Comparison

*TBA: To be announced

Solution: The WORK System Explained

The WORK (**W**orker **O**ptimized **R**eward **K**eeper) system is comprised of three main components.

1. **Reward Bank**
2. **Contribution Activity Manager (CAM)**
3. **Decentralized Associated Network (DAN)**

Reward Bank

The Reward Bank functions as a depositary for receiving and disbursing rewarded Blue Whale eXchange (BWX) from providers to contributors.

20% of BWX offered at the initial ICO will be reserved for the Reward Bank. In addition, 60% of net profits will also be reserved for the Reward Bank. The specific amount to be

held as reserves will be calculated annually and can be adjusted depending on the financial performance in any given year.

The Reward Bank may form future strategic alliances with partners who provide solutions relating to pension systems and asset management platforms.

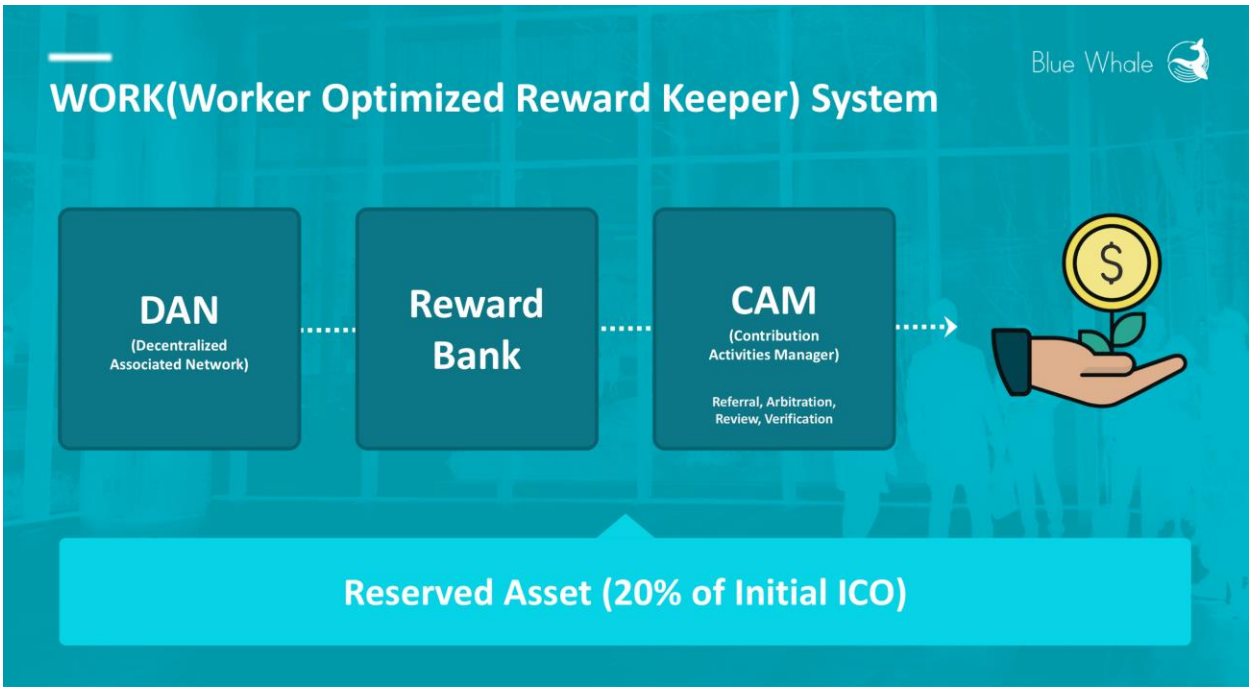

Figure 1. WORK System Main Modules

Contribution Activity Manager (CAM)

The CAM has been designed to distribute the rewards earned through contributor activities. Rewards are provided for connecting to the *Advertising Network*, resolving disputes through *Arbitration*[5] and building trust with the *Verification*[6] system.

Contribution Activity	Description
Referral	Successful advertising and Social Media referrals leading to purchases

[5] *The Bee Token: The Future of Home Sharing*. (2018). *Beetoken.com*. Retrieved 5 February 2018, from https://www.beetoken.com/

[6] *Gem's Blockchain*. (2018). *Gem*. Retrieved 5 February 2018, from https://gem.co/

Verification	Users will vet the service providers (e.g. freelancers) for authenticity
Arbitration	Council of juries selected from service providers (e.g. freelancers) and buyers meeting the prerequisite AdNet Score threshold

Table 5. Three Activities in the CAM

Referral

Blue Whale Ad Network allows the service providers (e.g. freelancers) to promote their own services for free by using the SaaS tools provided by the Blue Whale Foundation. The providers on the network can utilise the various participants' social media accounts to promote their own goods/services. When this leads to purchases, the participants will be rewarded.

For instance, when *Customer C* buys goods/services from *Freelancer A* through the Ad Widget on *Freelancer B*'s account, 5% of the purchase price will be allocated to *Freelancer B*, while another 5% will be allocated to the Blue Whale Foundation.

The collected proceeds will go towards covering the Blue Whale Foundation's operating costs, and 60% of net profits will be channeled towards the Work Reward System.

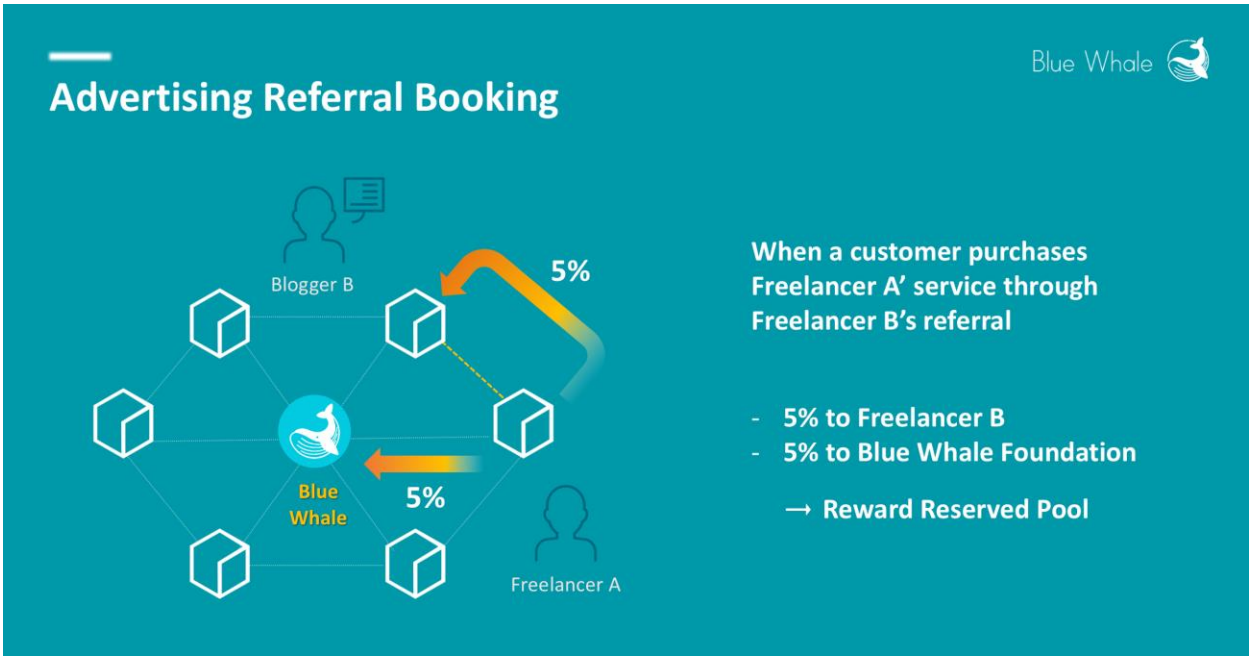

Figure 2. Incentive Structure of Referral Booking

The Referral Booking compensation system is designed to incentivize individuals to direct traffic between heterogeneous platforms. For instance, if a meaningful connection exists between a cleaning service and a home-sharing service like AirBnB, the Blue Whale's Big Data and Machine Learning (ML) algorithms will discover the relationship through its analysis and suggest targeted advertisements accordingly.

The Referral System will support heterogenous platforms across the Blue Whale Network. The Blockchain Smart Contract will build trust and transparency between the various platforms and allows for the Referral System's payouts to contributors to be automated.

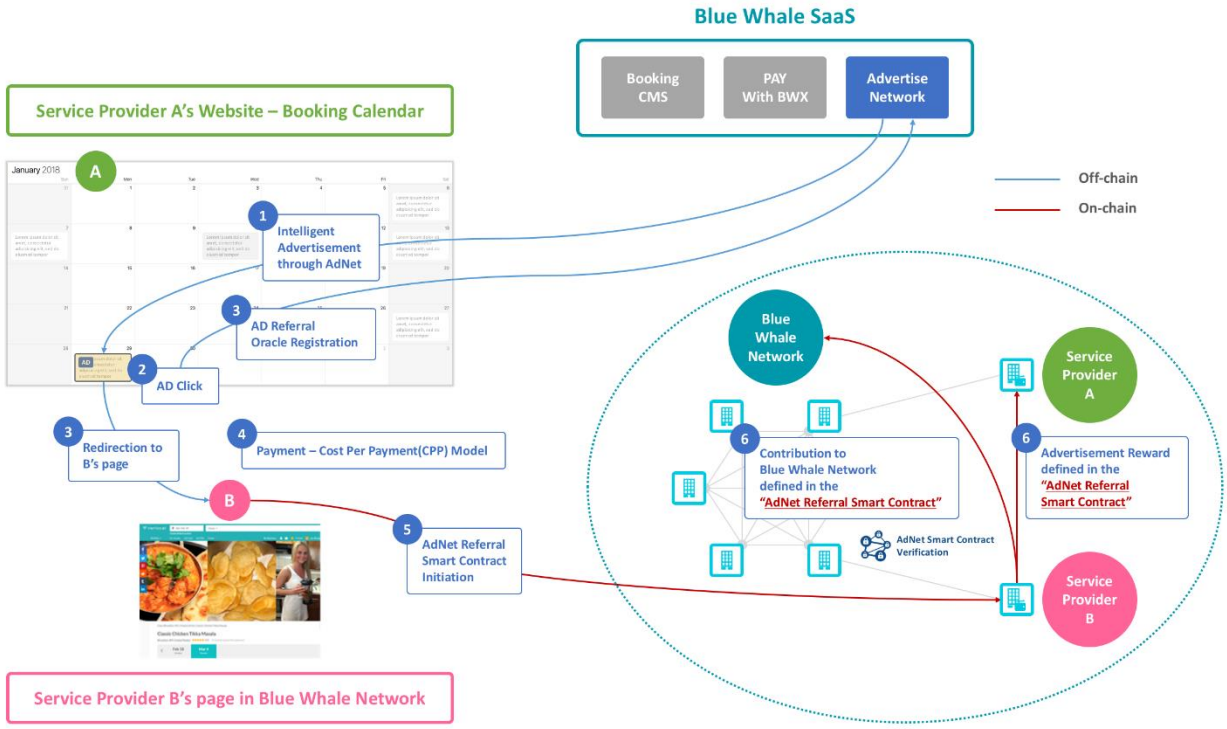

Figure 3. Referral System Flow Diagram

Verification

After the freelancers have fulfilled their contracts, the results of their work need to be verified. This is especially important for new entrants, or freelancers with lower ratings on the network. The verification of these freelancers by the community members will ensure a high quality of service by creating a reputational reward system.

Freelancer. For new freelancers, the initial 50 "tasks" will be checked by an independent "verifier" and the results sent to the buyers who hired the freelancer. The buyer then

provides a rating for the task done by the verifier. If the rating is lower than 4.0 out of a maximum score of 5 after 50 “tasks”, the freelancer will need to be verified again prior to making any sales. Else, if the freelancer’s rating is higher than or equal to 4.0, the freelancer need not be verified for his subsequent sales.

The verification cost will vary according to the freelancers’ ratings, meaning higher ratings equates to lower verification costs. The freelancers wanting to switch to a different verifier will need to pay a 2% fee.

Verification Cost = Service Cost x Min(Maximum verification reward rate, (Minimum Verification Reward Rate x (Minimum Threshold Rating/Actual Freelancer’s Average Rating)^2)

- Verification Cost: Cost that a freelancer is required to pay for being verified based on their rating
- Maximum Verification Reward Rate (Max. VRR): As the freelancer’s rating drops, the verification costs increase but cannot exceed the maximum verification reward rate.
- Minimum Verification Reward Rate (Min. VRR): Guaranteed verification reward rate for a verifier is pre-defined.

For example, a freelancer with a 2.0 rating who wants to have a $10 service verified will have a Maximum Verification Reward Rate (Max. VRR) of 50%, and a Minimum Verification Reward Rate (Min. VRR) of 10% and a minimum threshold rating of 4.0 is required to pay the following verification cost:

$$\text{Verification Cost} = \$10 * \text{Min}(50\%, (10\% * (4.0/2.0)^2)\ ) = \$4$$

Verifier. To ensure that the verification process is fair, a verifier must:

- be a freelancer working in the same field,
- have completed over 100 “tasks”, and
- maintain a rating above 4.9

In order to prevent reviews carried out in bad faith, the verifier needs to submit 1% of the service cost to an escrow account. After completing a successful verification and receiving a rating above 4.0, the verifier will be refunded the 1% escrow payment, and also receive an additional 1% as a Verification Reward. If the rating drops below 4.0, the verifier will receive only a portion of the Verification Reward while forfeiting the escrowed fee. If the verifier does not act in a timely manner to verify the freelancer, the verifier will forfeit both the escrow fee and the Verification Reward.

Verification Reward = Min(Verification Cost, Verification Cost x (Actual verified task rating / Minimum threshold rating)^2)

- Verification Reward: Reward that a verifier will receive for a verification.
- Verified Task Rating: The actual rating of the verified task will decide the reward for the verifier.

For example, the verification cost for a $10 product while receiving a Rating of 2.0 with the minimum threshold rating of 4.0 will be the following:

$$\text{Verification Reward} = \$10*(2.0/4.0)^2 = \$2.50$$

Verification Escrow Rate = Max(Minimum Escrow Rate, Minimum Escrow Rate x (Minimum threshold rating / Average verified service rating by the verifier)^2)

- Verification Escrow Rate: Verification Rating below the Minimum threshold rating will result in higher escrow fees
- Minimum Escrow Rate: Minimum participation rate for verification

For example, when the verified services are rated 2.0 with the minimum threshold rating of 4.0, the verification escrow rate will be the following:

$$\text{Verification Escrow Rate} = 1\% * (4.0/2.0)^2 = 4\%$$

Arbitration

When a financial dispute occurs between the freelancers and their customers, both parties can request for an arbitration. The cost of arbitration will be transferred into an arbitration fund. The dispute will be arbitrated by a Council consisting of community jury members fulfilling the prerequisite qualifications. This allows the networked community to objectively and securely resolve disputes internally.

To qualify as a Council jury, the jury needs to:

- be a freelancer working in the same field,
- have completed over 100 “tasks”, and
- maintain a rating above 4.9

Participants picked as jurors in the arbitration Council will submit their BWX coins into an escrow account. This ensures their impartiality and reduces the chance of members acting in bad faith. This also encourages the jurors to decide in a timely manner. Jurors are not penalized for incorrect decisions and can only lose their coins if they fail to provide a decision within a time limit.

Jurors are required to leave justifications for their decisions. This ensures that the requesting parties understand the logic that led to the decision. If the rationale behind the decision is not satisfactory to the requester, the requester has the right to escalate the dispute to the wider public who will vote on the decision. If this happens, the appeal rate for each jury that failed to render an adequate decision will go up, undermining their chances of participating in future arbitrations.

After the dispute has been resolved, the participating jurors are paid their rewards at market rates, and will receive ratings by the disputing freelancer and the user. The jurors with consistently low ratings will be disqualified.

If the jurors fail to provide a reasonable decision, both disputing parties can decide to expand the size of the jury pool up to a maximum of three times, but will be required to deposit a bigger amount (at least 2x) to compensate the jurors and prevent frequent escalations by disgruntled losing parties.

Arbitration Process
1. Dispute **Initiation**: Either the freelancer or the user can request for arbitration in cases of conflicts 2. Dispute **Reporting**: The request is sent to the arbitration Council and the two parties need to submit the required payments 3. Dispute **Review**: 5 or more jury members will be selected at random to decide the case 4. Dispute **Conclusion**: Payments are made to the jury members

Contribution Payout Options

There are three methods for contributors to receive rewards based on their contribution activities.

- Immediate
- Event-based
    - Contributors meeting the required pay threshold and working duration can earn their rewards during their time-off as a form of vacation/unemployment benefit
- Long-term

Duration	Reward
Less than 10 years	Principal guaranteed
More than 10 years	Principal + 2% interest

Table 6. Long-term Reward Table

*To be adjusted in participation with potential financial institutions.

Decentralized Associated Network (DAN)

The DAN is created by installing SaaS tools such as Booking and CRM software on websites and social media accounts, transforming each website/social media account into a node in the network. The DAN collects user data from online traffic, much in the same way which search engine and social media giants like Facebook and Google

currently do. The main purpose of DAN is to collect user data and build a decentralized advertising network as a main business model of Blue Whale Network.

The Motivation: Verlocal

Verlocal, the official partner of the Blue Whale Foundation, is a SaaS-enabled marketplace currently operating in the U.S., Canada, and Singapore with a plan to launch in Japan in February 2018.

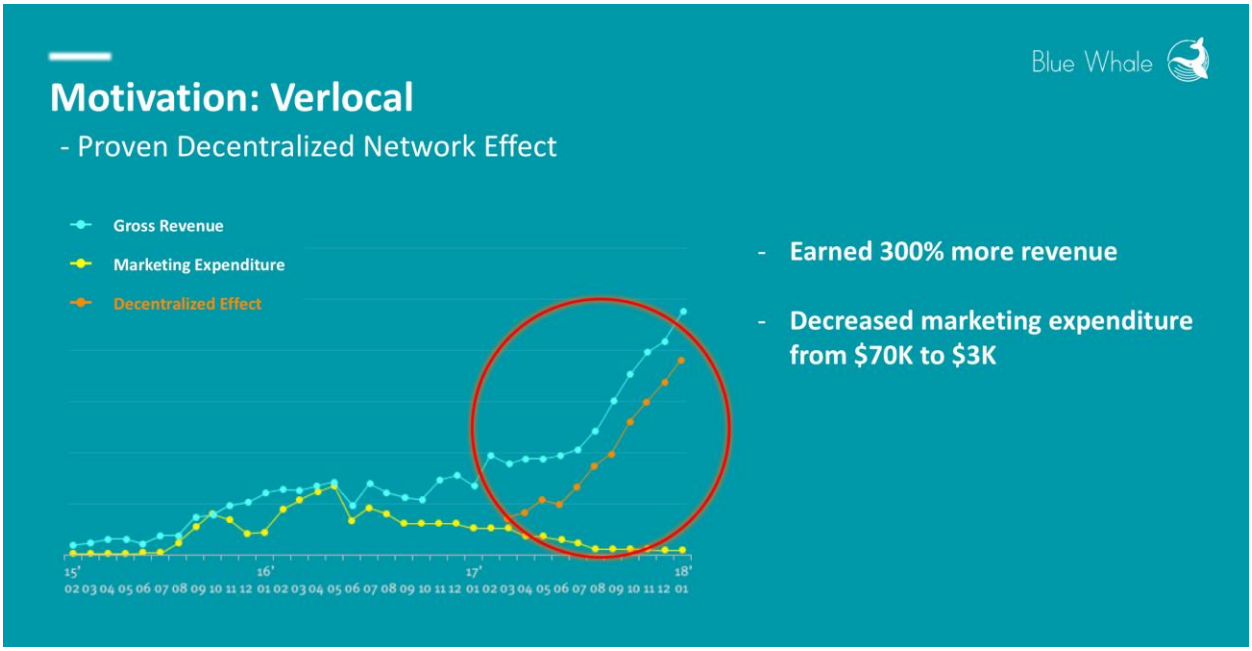

Figure 4. Verlocal Decentralized Network Effect

Verlocal differentiates itself from other competitors by providing free Booking Software to be installed on providers' websites which motivates providers to join the network. Re-targeting of advertising to visitors lowered the monthly advertising bill for SMEs from $70,000 to $4,000 while resulting in 300% higher sales.

Architecture of DAN (Decentralized Associated Network)

The Decentralized Associated Network can be created by installing SaaS tools such as Booking Software and Ad Display Widgets on websites and social media pages.

Booking Software Widget. Providers installing the Booking Software on their own websites, blogs, and social media accounts can convert all incoming transactions from fiat currency to cryptocurrency coins. This establishes the required cash flow for BWX.

Advertising Network. The Blue Whale Foundation's decentralized advertising network is established when the providers install the Booking Ad Widget and the Ad Widget. The Booking Ad Widget, as a component of the Booking Software, is used to provide windows for other providers to run their advertisements and promotions.

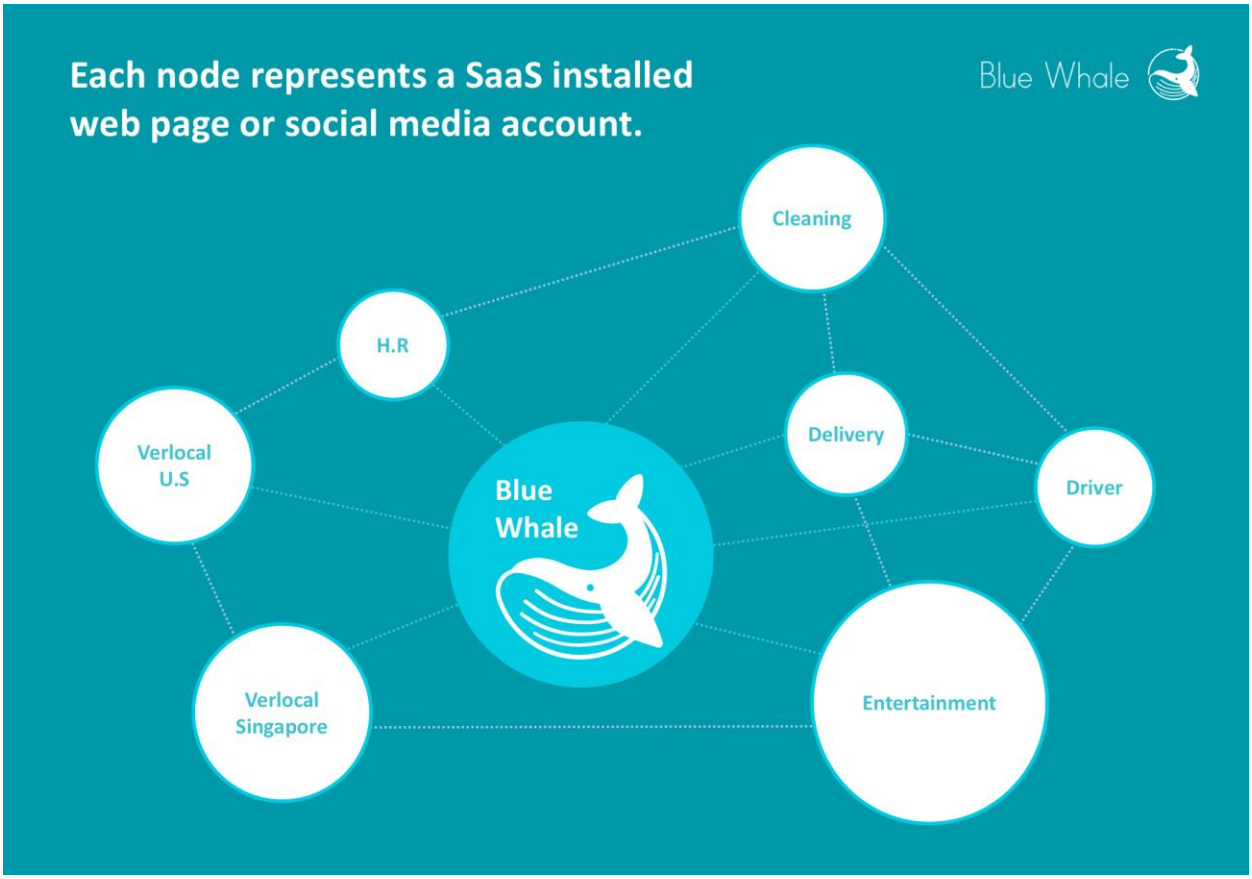

Figure 5. Blue Whale Decentralized Ecosystem

The diagram below provides an example of how the Booking Ad Widget can help the providers not only operate their own promotions but also help other providers as well.

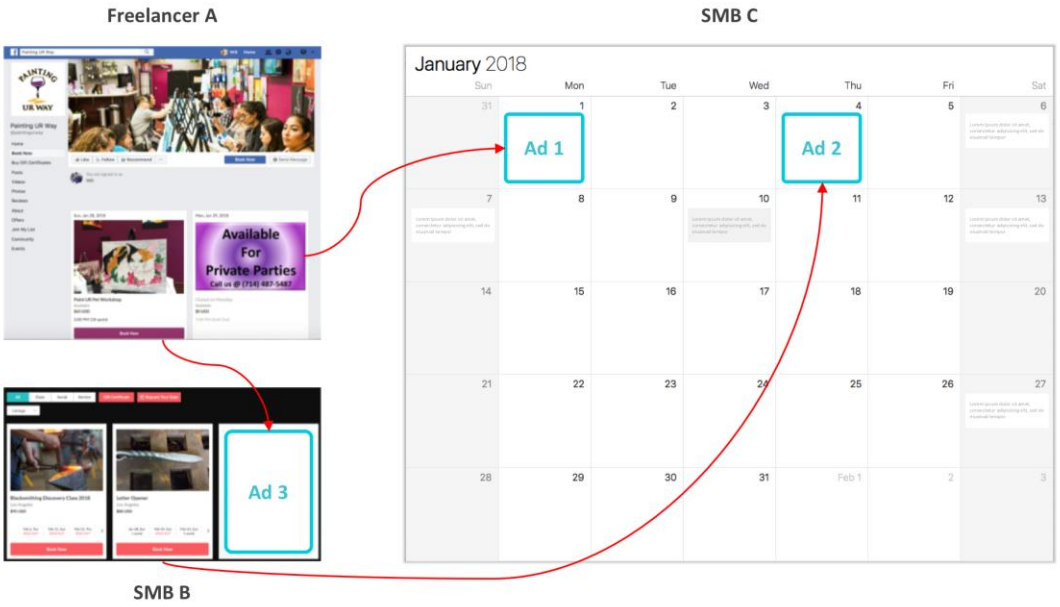

Figure 6. An example of the Blue Whale Ad Network utilizing the Booking Ad Widget

Not only the providers, but other participants on Blue Whale Network can also install the Ad Widget on their websites and social media accounts in order to promote their products and services and earn rewards.

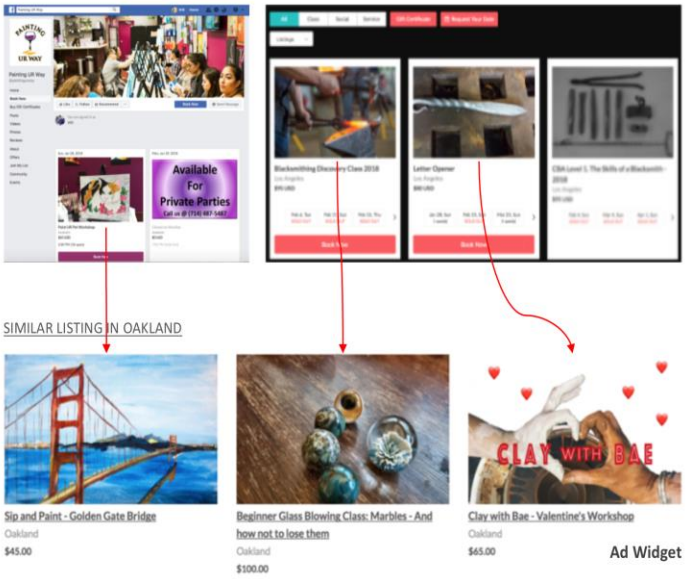

Figure 7. Example of Ad Widget on the Blue Whale Ad Network

The Blue Whale Network will establish a Referral System using the diverse Ad Network. Corresponding Ad Network Referral data will use Blue Whale Network's Oracle (a trusted connection between the blockchain and the real world) to connect to the

blockchain. This allows different sharing platforms to secure advertising and commission agreements using the Smart Contract and to earn compensation through the Referral System. Dor instance an AirBnB host posting an ad for Uber on their page can earn Referral rewards if a customer uses Uber by accessing the ad.

Big Data & Machine Learning Solution. The decentralized network, based on the same SaaS architecture as the Blue Whale's Booking Software, is the optimal solution for collecting data.

Data collected in this manner will be saved to the database in real time.

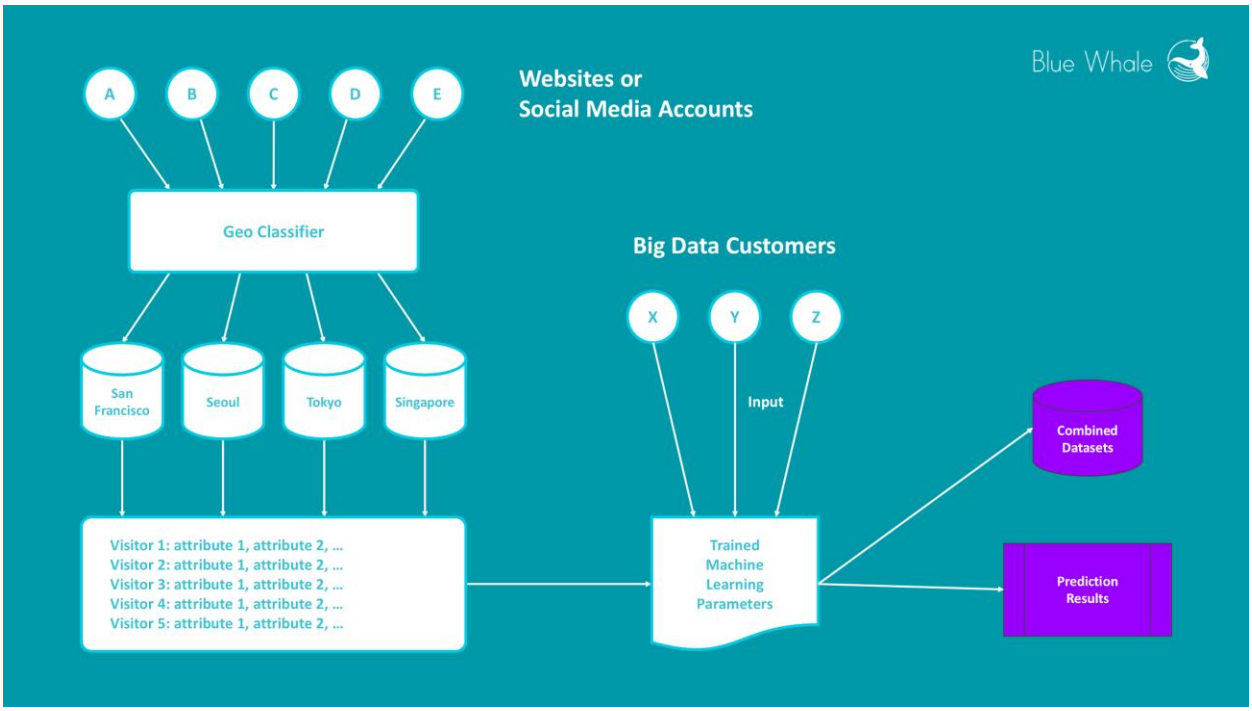

Figure 8. Blue Whale Big Data & ML Architecture

The saved user data will be labelled according the type of goods/services purchase through the Booking Software. The labelled and categorized data will then be used to train the Machine Learning algorithm for two different uses.

- Use visitor's data to aggregate and create a list of potential future purchases
- Analyze target visitor's purchase data to find lookalike visitors

Blue Whale Foundation's privacy policy regarding data collection and analysis will be released publicly and adhered to strictly. The predicted data using Machine Learning, and the proceeds of the data sold, according to the privacy policy will be collected by the Blue Whale Foundation. A portion of the proceeds will be accrued into the Reward Bank to be disbursed as incentives.

WORK - Powered by Blockchain

Blue Whale Network (BWN) believes that all participants in a sharing platform should benefit. The BWN plans to create a network of various sharing platforms which share our philosophy.

Federal Architecture on Blockchain

Since each platform has their own unique form of governance, it is impractical to ask the various platforms to change in order to participate in the Blue Whale Network. The network respects the independence and the distinctness of the various platforms. By operating with a federalized philosophy, each platform/node on the BWN will be called a "Province" with the free exchange of ideas and coins between the different Provinces. The blockchain is the best technology to achieve this vision.

Blue Whale Network's cryptocurrency is called the Blue Whale eXchange (BWX). The platforms using BWX can set their own reserve ratio and can also issue their own fixed-exchange rate coins.

The benchmark reserve ratio will be set at 110% of previous year's lowest BWX price. If and when the coins issued by another platform does not meet or exceed this reserve ratio requirements, they are required to lock-in a purchase of additional BWX. Any platforms breaking these financial rules will be given penalties affecting their voting rights and incentive payments

The Federal Governance Council comprised of representatives from the Provinces will determine the reserve ratio requirements and rates. Since the minimum is set at 110% of the previous year's lowest price, if the price of BWX drops below this rate, other platforms will be required to lock-in and purchase additional BWX. This helps to limit downward volatility and stabilize the price of BWX.

Participating platforms can issue their own coins. Due to differences in national economies and exchange rates, localized platforms will be able to issue coins that meet their specific needs. However, the individually issued coins needs to have a fixed exchange rate with BWX, which will be priced in USD.

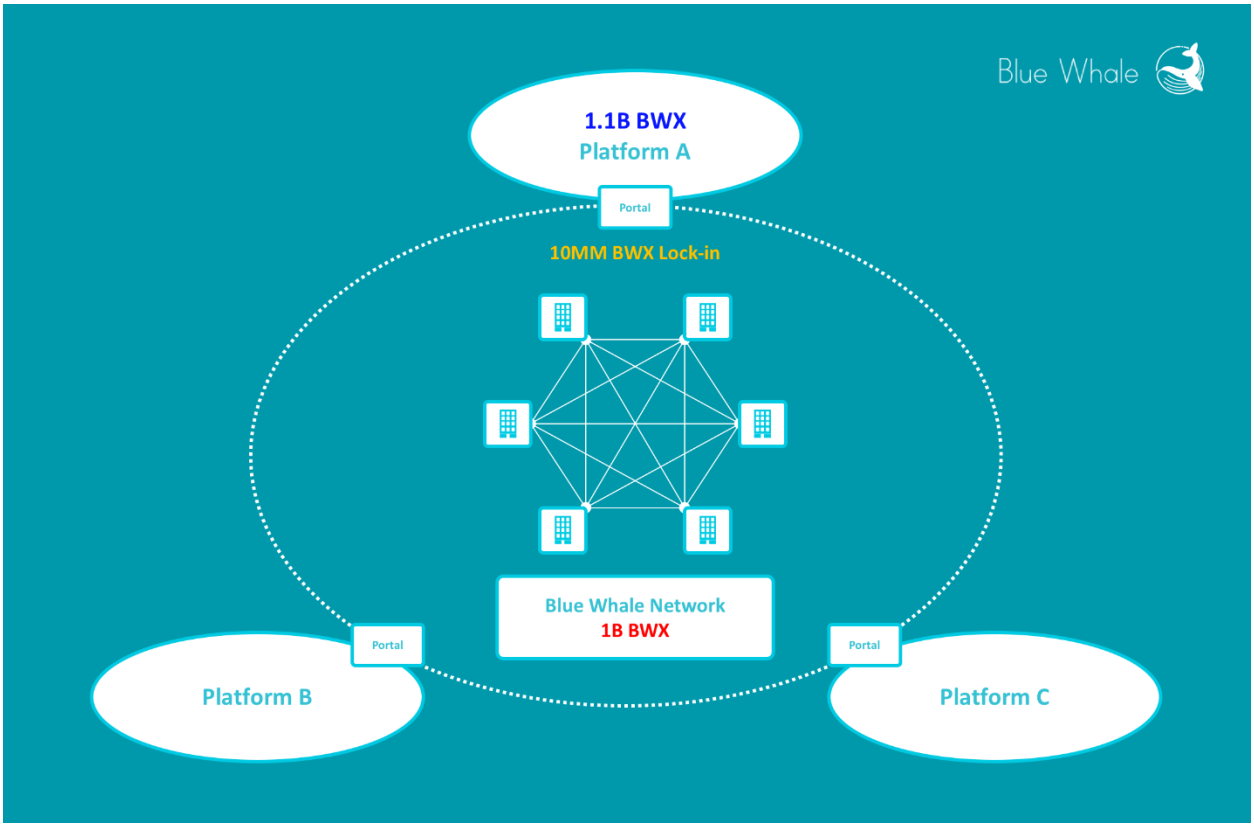

Figure 9. Federal Architecture on Blockchain

Federal Architecture Process

1 When a new platform has been launched:

The Reserve requirement of 20% is proportionately calculated based on 200M MAU for each platforms. Newly launched platforms that do not meet the 200M MAU threshold are proportioned additional coins, free of charge. For example, a platform with 10M MAU wished to join the Blue Whale Network. 10M is 1/20 of the 200M basis MAU. Therefore, the platform will be given 1% (1/20 of 20% basis Reserve requirement) of coins for free.

The initial BWX issuance is presumed to be at 100B coins. This implies that each platform can issue 1B coins and receive a free allocation of 100M coins. Platforms wishing to issue more than 1B coins are required to purchase and lock-in additional BWX.

2 When the Reserve has been depleted
If the reserved 20% of initial coins have been depleted, the platforms can issue additional Reserve coins through DAO (explained in the next "2. DAO" section)

3 When a platform's issued coins exceed the Lock-In requirements:
The use of Smart Contracts will prevent platforms from issuing more coins than the Lock-In requirements allowed in the BWN.

In cases where the Reserve falls below 10% due to decreasing BWX price, the participating platform is required to purchase additional BWX within 1 month.

The reference BWX price is calculated as the average closing price of every hour within the last 24 hours.

Decentralized Autonomous Organization (DAO)

Each Province, using the Blue Whale Foundation's (BWF) voting system, can participate in the governance of BWF. The participants can manage a stable platform and currency market by creating and adjusting policies such as operating costs, savings percentage into Rewards Bank, Referral fees, issuance of new coins, incentive/payout algorithm and penalties.

The voting system will operate as following:

- Voting agenda will be decided by the representatives of the platforms/nodes on the Blue Whale Network.
- All participants on each platform who hold the prerequisite reputation for arbitration will be eligible to vote.
- The requirements for voting participation and the rules for agenda-setting can be altered through voting.
- Initiatives that attract over 200,000 users' support must be added to the agenda for a general vote.

- The voting power of each platforms will be proportional to the amount of BWX that the platforms are required to lock-in.
    - For example, if Platform A holds 100,000, Platform B 200,000, and Platform C 300,000 BWX coins that are “locked-in”, the participating platforms will be entitled to 1, 2, and 3 votes, respectively. However, the method of calculating the voting power can be altered through the general voting agenda.

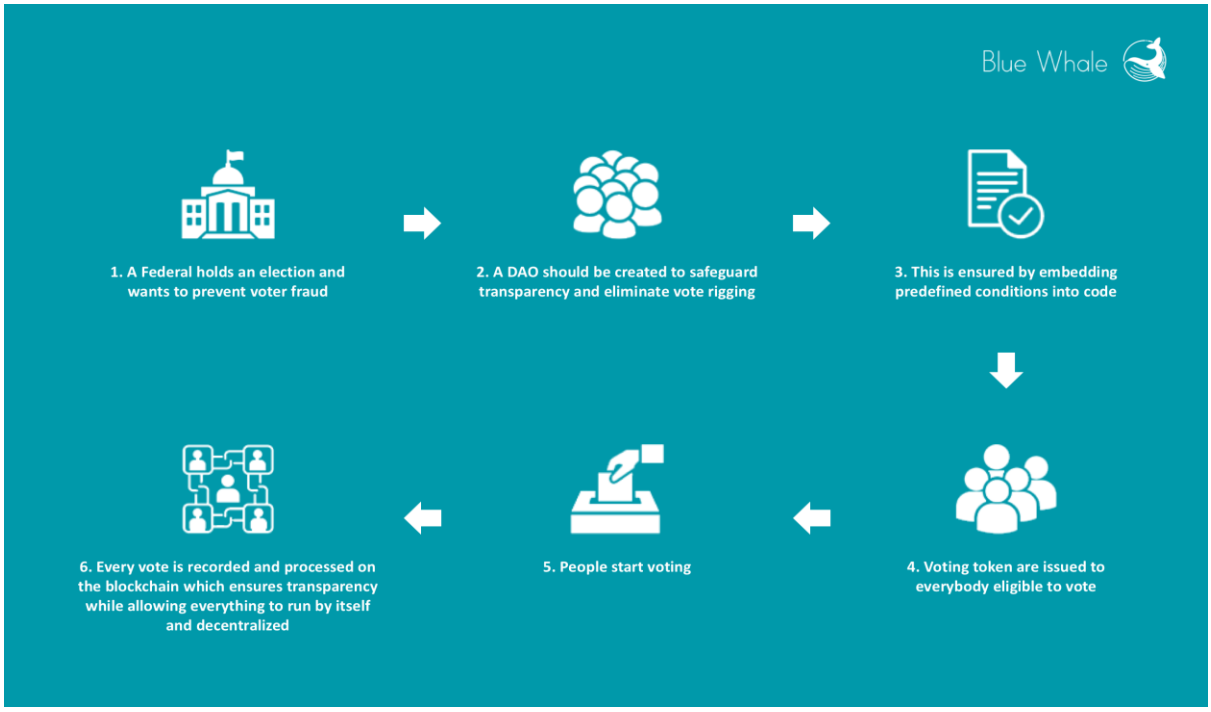

Figure 10. Blue Whale Foundation Voting System Process

Decentralized Ad Network

Users on different sharing platforms can participate within the Ad Network by placing ads and providing windows and channels for other advertisers. When the ad results in a purchase, both the window provider and the Blue Whale Network will earn commissions.

Blockchain technology allows for users to benefit fairly across various platforms using the Decentralized Ad Network. It makes sharing of purchasing data and the subsequent tracking and analysis to be performed transparently and without fees. Instead of running separate ML algorithms on each platforms, the Blue Whale Network’s Oracle

will aggregate the advertisement data in order to increase the efficiency and the accuracy of advertisement targeting.

However, each platform is free to decide, through voting, on whether it will participate on the Ad Network.

Conclusion

Since the inception of the Blue Whale Foundation, we've considered our revenue models to build a sustainable reward system for worker and contributors. We strive to connect the providers with the appropriate users to benefit all parties and not just a few platform owners.

Through this sustainable reward system, Blue Whale Foundation will provide the essential solutions to the fundamental problems arising from the increasing prevalence of the sharing economy.

Appendix

A. Anticipated Timeline (Roadmap)

Business Roadmap

Date	Description
2018. Q2	● ICO ● Partnership - Sharing Economy Industry in Korea
2018. Q3	● 1st Meet-up for partner and investors ● Listing of BWX
2018. Q4	● Integrating Verlocal Services ● Service Open in US ● Service Open in Canada ● Service Open in Singapore ● Service Open in Japan ● Partnership - Sharing Economy industry in global - EU,ASIA and US
2019. Q1	● 2nd Meet-up for partner ● Alliance with 2-3 partners for WORK system
2019. Q3	● Services Open: WORK for 2-3 partners in Korea ● 3rd Meet-up

Table 7. Business Roadmap

Technical Roadmap

Date	Version	Description
2018.Q4	Arctic	● Open source of WORK ● Apply to Verlocal - build-in advertisement module and SaaS tools
2019.Q4	Atlantic	● DAN for Big Data and ML ● CAM for all other activities(verification, arbitration, Review) ● WORK system for each partner ○ Big Data and ML

2020.Q4	Pacific	• Apply retirement benefit and reward system in RB and CAM for employment reward system • WORK system for government or social system.

Table 8. Technical Roadmap

B. Token Sale

Blue Whale eXchange	
Token Name	Blue Whale Exchange
Ticker Symbol	BWX
Technology	ICON
Token Features	Multi-Utility Token
Total Supply	55,000,000,000
Soft Cap	25,000,000 SGD
Hard Cap	55,000,000 SGD
Accepted Currency	ETH, ICX

Table 8. Token Summary

Token Allocation

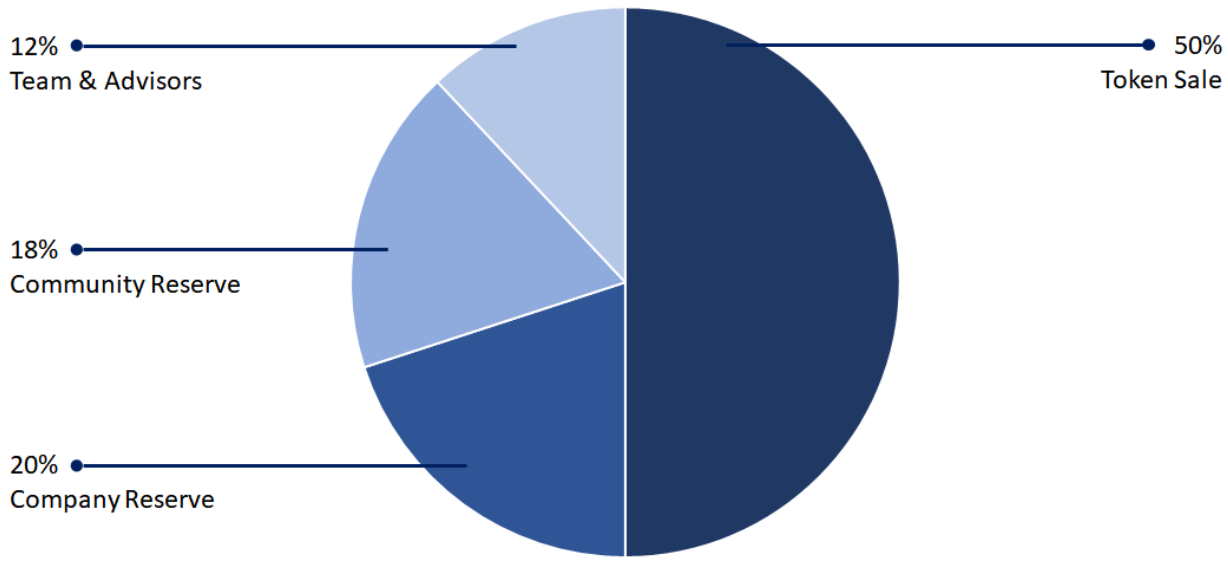

Figure 11. Token Allocation Chart

The Blue Whale team will be on a 3-year vesting schedule. The team will receive ⅙ of their allocation 6 months after the end of the Public Sale. Every month thereafter, the team will receive 1/36 of their allocation until the 3-year vesting schedule is finished. Therefore, if one of the current members were ever to leave, no more tokens will be distributed to the team member. The remaining amount of tokens will be allocated to a newly appointed team member.

Use of funds

Below is the breakdown of the funds after the token sale.

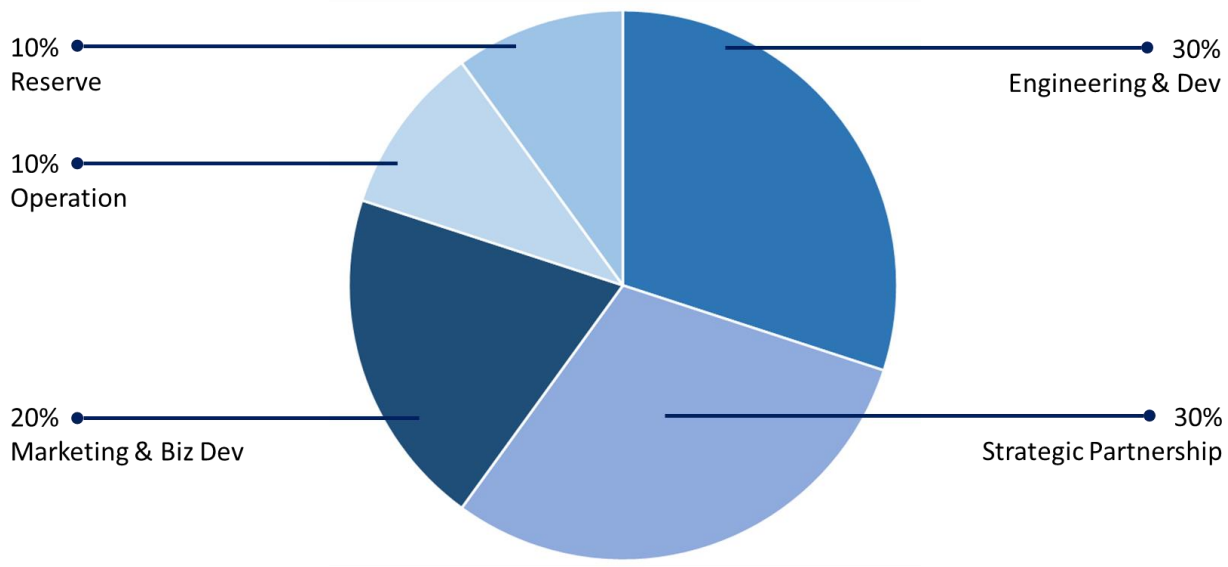

Figure 12. Fund Allocation Chart

C. Team

Will Lee / CEO, founder

Will Lee is the CEO of Verlocal. He is a serial entrepreneur and has been running a couple of startups in the San Francisco Bay Area for the past 7 years. Will has also worked in the sharing economy industry for 5 years. He studied Artificial Intelligence at Stanford University and now runs Verlocal, a SaaS enabled decentralized marketplace where people can monetize their intangible assets such as skills and knowledge. His mission is to empower individuals to become one-person business owners and maximize

their full potential. He aspires to create a human-centered industry where individuals can continue to develop and improve themselves through learning experiences.

Hongkyu Lee/ CSA, co-founder

Hongkyu was the CTO of Nomadconnection and the Director of Dayli Intelligence. He studied computer science at POSTECH and now runs Nomadconnection, Dayli Intelligence, and TechFin, companies based on artificial intelligence and blockchain technology. Recently, as a data scientist at Shinhan Bank, he designed an AI core platform architecture that can test and optimize machine learning algorithms on the web without any separate environment. He designed the ucoin system for university consortium based on the loopchain. He also designed the system and architecture of the wibeecoin used in Woori Bank.

Hawon Chung / COO, co-founder

Hawon Chung is the CEO of ChainTOB, a global blockchain service operator. He studied computer science and engineering at POSTECH. He holds a wide breadth of experience through multiple positions (e.g. country manager, sales, strategic programs manager, product/project manager, and system engineer) at various global companies including Sun Microsystems, Oracle, Splunk, and Elastic. He had setup multiple startups and has ran his own business in the IT industry since 2000. He believes that blockchain technology would not only change the world, but also give fair value to all participants in the economy. He is continuously looking out for new IT technologies that would contribute to the society.

Jaehyun Park / CAO, co-founder

Jaehyun Park worked at SKT (EVP) and at Samsung Electronics (VP) for 10 years. He developed the first sharing economy platform in Korea and created Samsung Pay as Global General Manager. He has spent over 24 years in the S/W and ICT industry. He is also an entrepreneur, a blockchain investor, and a public speaker. He has written about Software technology for over 10 years and continues to write technical columns on Electric Daily and ZDnet Korea about blockchains and cryptocurrencies. He is leading a blockchain technical research group.

Jaewoong Choi / Head of product, co-founder

Jaewoong is an experienced product manager with over 10 years of experience in the IT industry. His expertise lies in infrastructure, software, web, and mobile applications. Most recently, he was the head of product and service at DomoSafety S.A. a leading healthcare startup in Switzerland. His responsibilities include managing service strategies, designing and implementing machine-learning algorithms for healthcare platforms and medical data analytics. Previously, he has led numerous large-sized projects at Sun Microsystems and Oracle that required the application of ERP, MES, Enterprise Portal and Cloud Platform for Samsung, LG and Hyundai.

Changsub Keum / CIO

Changsub is a software architect and researcher with 20 years of experience in the ICT industry. His interests include blockchain technologies, service platforms, and software architectures. Most recently, he was the research director of a trustworthy network service platform at ETRI, a government-sponsored research institute in South Korea. He got the Ph.D. at CMU(Carnegie Mellon University). He is a board member of Korean Software Engineering Society.

Ryan Chew/Director of Business Development & Strategy (Singapore)

Ryan studied the sociology of small business at the Nanyang Technological University, and now runs Verlocal's operations in the Southeast Asia region: a SaaS-enabled, decentralized marketplace for freelancers. Ryan spent several years in the startup scene, having founded several startups including Fixxir, an Uber for car repairs. As a serial entrepreneur, he is on a mission is to create a sustainable ecosystem which empowers individuals to become unchained from office desks and become successfully self-employed.

Luis Gil/Director of Business Development & Strategy (U.S)

Luis F. Gil is the Head of US Business Development and Account Management at Verlocal. He studied at the University of California, Santa Cruz where he obtained a Bachelor's Degree in Economics and was awarded the Chancellor's Undergraduate Internship Program scholarship. Following college, he served 7 years in finance, working at major banking institutions like HSBC in sales & trading before returning to his childhood passion of technology. At Verlocal, Luis emphasizes the power of building

long-lasting relationships with customers and ensures that every client-facing team member embodies this principle.

D. Advisors

Marco Torregrossa / Managing Director at Euro Freelancers and Secretary General at European Forum of Independent Professionals

Former policy officer in the EU Commission and a lawyer by training, Marco is specialized in new forms of collaborative self-employment, cooperative solo-entrepreneurship, digital work platforms, and the impacts of flexible labor regulations on the future of work. For the past 13 years, he has been leading government relations and advocacy efforts, advising policymakers on the issues that one-person businesses and their ecosystem encounter.

Kyungjoon Lee / ICON Foundation Council

Kyungjoon studied computer science and engineering at POSTECH. He developed, at securesoft, Suhoshin which is the first indigenous firewall of Korea. He ran his own company, NomadConnection. He launched Zimly (a P2P media service) platform with over 30M registrations. Currently, he is the CEO of Dalyi intelligence and holds a position as a ICON foundation council member.

Jonghyup Kim / ICON Foundation Council

Jonghyup studied computer science and engineering at POSTECH. He has a 20 year experience as a security engineer working on areas such as PKI, authentication, and security protocols. He holds a CISA certification and multiple patents relating to information security. Currently, he is the CEO at theloop (blockchain technology company responsible for loopchain) and an ICON foundation council member.

Kwangsuk Lee /Co-founder and Chairman, Incruit Corporation

Kwangsuk is the co-founder and chairman of Incruit. In 1998, he created an Internet service to match job opportunities with resumes. He has 20 years of experience in the internet recruitment industry. He is serving as an independent director for Winix, Co, Ltd. He is an active member of Entrepreneurs' Organization, helping startup

entrepreneurs. He was previously a partner at Primer and an independent director for Gravity, Co. Ltd.

Hyunkeol Kim / Dalcomsoft CEO

Heunkeol is the CEO and founder of Dalcomsoft, Co., Ltd., where he has developed and published mobile music games including Superstar BTS (Superstar SM, JYP). Prior to Dalcomsoft, he was the COO and co-founder of Soribada, Co., Ltd., the first online music streaming service company in Korea, which listed on KOSDAQ in 2007. During his tenure as COO of Soribada, he developed and produced various projects including Milk and Samsung Music apps for Samsung Galaxy smartphones.

Sangbum Kim / Bloter.net CEO

Sangbum is the CEO of BLOTER, which is the most popular technology news media in Korea. He has worked as a reporter since 1995 for multiple IT-oriented news media such as The Electronic Times, Dot21 and INEWS24. He wrote various articles and tech columns focused on software & services. He is focused on blockchains because he is confident that technology will lead to better human lives.

Namsik Lee / President at Suwon University

Namsik graduated Seoul national university and got MS and Ph.D. at KAIST. He started to work as researcher at Michigan University and KRISS for 10 years. He has an enthusiasm as an educationist. He was a professor start from KAIST, Hansung University and Hongik University. And, He was a university president at Gyewon Art University, Suwon University and Junnam University. Besides his educational experience, he has been chairman, BOD, committee in various social association, public institute and government. Currently, he has been looking into the blockchain technology for the next generation.

Sanku Jo / Kozaza CEO

Dr. Jo is founder & CEO of KOZAZA, a Home Sharing of Korea. He is a seasoned global serial entrepreneur with 30 year Internet experience both in Silicon Valley and Seoul. Prior to KOZAZA, he lead new businesses of Internet and Mobile as a Vice President both in KT and LG U+. As CTO, he co-founded NetGeo, an Internet Geolocation pioneer in Silicon Valley. He researched Interenet2 and distributed computing at the Lawrence

Berkeley National Laboratory in California. He got the doctoral degree from Texas A&M in USA and BS/MS from KwangWoon University in Seoul.

Taejin Kang/ Insignary CEO

Taejin is an experienced IT professional whose career ranges from a startup founder to executive positions at some of the largest companies in the world. In 1999, he co-founded ThinkFree with the mission to deliver desktop software as a free internet service. In a 2001 magazine interview, Microsoft CEO Steve Ballmer mentioned ThinkFree as one of the biggest threats to his company, second only to Linux. He was one of 20 "Web 2.0 Heroes" Bradley Jones interviewed for the 2008 book by the same title. When mobile became the major battleground for internet services, he served as the head of the Service Incubation Office at Korea Telecom, and then as the head of the Media Service Team at Samsung Electronics before returning to his start-up roots as the President and CEO of Insignary. He has presented at high profile tech and business conferences around the world such as Web 2.0 Expo, Open Mobile Summit, and MIDEM.

Jongmin Ham / LF VP

Jongmin has been working in Internet service technology and marketing for over 20 years. He is currently working as CTO/EVP at LF and leads their digital commerce services. Since 2006, he worked as EVP of Naver and as VP of Samsung Electronics, creating and developing many Internet services.

Minu Park/ CrowdWorks CEP

Minu is an entrepreneur who has had 4 startup and 3 M&As. He is a columnist and an ICT specialist for university professors. His company, Crowdworks, is working on an online crowdsourcing platform for machine learning engineers, similar to Amazon Mechanical Turk. His expertise lies in, but is not limited to, strategy planning, service planning, system design, organization management, and startup consulting.

E. Partners

Company Name	Website	Description
Verlocal	http://www.verlocal.com	Global freelancer SaaS platform provider (US, Canada, Singapore and Japan)

ICON Foundation	http://www.icon.foundation	Global Top Tier blockchain based distributed platform and operating foundation
theloop	http://www.theloop.co.kr	Global No.1 blockchain core technology - loopchain
ChainTOB	http://www.chaintob.com	BPaaS platform based on loopchain technology
Insignary	http://www.insignary.com	Security firm detecting vulnerabilities in binary codes
Kozaza	http://www.kozaza.com	Korea's No.1 house-sharing company (i.e. Airbnb)
Dalcomsoft	http://www.dalcomsoft.co.kr	Korea's No.1 music and entertainment company
CrowdWorks	http://www.crowdworks.co.kr	Korea's No.1 crowdsourcing company (i.e. Mechanical Turk)
Bloter	http://www.bloter.net	Korea's No.1 ICT magazine and blog company

Table 8. List of Strategic Partners