Poker Token Network

Peer-2-Peer Poker, Blockchain Open Security Data, Trustless and Serverless features

Introduction

The Poker Token Network (PTN), is issuing a new crypto-token, based on the Ethereum token (ERC 20) [5]. This token will power the network, using advanced cryptography, cryptocurrencies, smart contracts and blockchain technology.

Our technological advances will allow players, licensees, and stakeholders to have top security, lower operating costs , We offer a trustless setting, where cards drawn are truly private (using concepts of homomorphic encryption among other technologies [4]) and removes the trust needed in a central gaming server., similar to that of Shamir Et Al in 1981 [2] - e.g. 'Mental Poker' [1] .

PTN's deployment model includes licensing, white-labeling and other features that allow for the Poker Network to be discoverable to the masses, ensuring short and long-term success by spreading outside the cryptocurrency community converting online gamblers to crypto-token/currency gamblers, thus increasing the value of the Token issued, stemming from the laws of supply, which is limited, and demand, which is increasing.

The Token value will further give way to a massive marketing and promotional budget, assuring success for establishing a player base. We will publish gambling and cryptographic data, such as random seeds on a blockchain. This way researchers and security analysts, can review and make sure that there are no collusion or other type of unfair elements of the game.

In short, our plans are to deploy a Poker Game, which through cryptography, cryptocurrencies, smart contracts and blockchain technology, allow for the most secure, fair, open and low cost-to-operate and play, giving both operators of poker rooms and players the best of possible solution - The Premiere Crypto Poker Network, governed by the ERC 20-based Poker Token, Smart Contracts and safe-and-secure, blockchain cryptographic solutions.

Our token sale is herein detailed, where we anticipate to distribute tokens to early token buyers at a deep discount, at 10 cents or less in the first rounds. We foresee a quick increase of the token price, once deployed, reaching \$5 or a 50x acceleration in price per token within a short-to-mid term.

Executive summary

Poker needs no introduction, as it has been played for about 200 years in the US and has spread to all over the world the last 100 years. Since the first online poker operations were live in 1998 (Planet Poker) and 1999 (Paradise Poker), poker enjoyed explosive growth after 2003. Much of aforementioned growth is accredited to the Moneymaker effect [3]. By 2008 it was on par as the largest revenue stream for online gambling companies, vying for the title along with sports betting and casino revenues.

Poker continues its large share in terms of revenues for gambling companies world-wide. From its meteoric rise and popularity in media, it is today an introduction platform, i.e. people come for the poker, to learn, to hopefully win, but stay and play casino, make a bet on sports or other revenue bearing activities. Poker is thus pivotal for any gambling company, as it introduces new gamblers.

So why don't all gambling companies have Poker? Two short answers; First: Poker needs critical mass therefore difficult to launch and Secondly: licensing a poker product from other networks is extremely costly in setup, maintenance and other fees. Gambling represents a very large percentage of the cryptocurrency economy, with estimates ranging from 10-15% all the way up to 50%. It's clear that gambling and cryptocurrencies have a very large overlap, and gambling represents a huge opportunity, particularly in the crypto-gambling community.

Cryptocurrency gambling companies have scant options to develop a poker site where the users could play directly with bitcoin, ethereum or other cryptos. There are no cryptocurrency poker networks, nor any poker software setup to handle such currencies.

We aim to launch the very first Cryptocurrency Poker Network, wherein licensees and users could send their players to shared tables; where the critical mass issues would be shared between all licensees. The players would enjoy the game of poker, betting with their favorite crypto-currency, see full tables, plenty of options, different game types, seat counts and limits. Licensees would enjoy the tremendous benefits including but not limited to fractional costs and the lowered risks associated with launching their own stand-alone poker site. We would also have Network-driven marketing concepts where our licensees and players will engage in massive tournaments, viral campaigns and other concepts to drive revenues for all participants of the Network.

Our Poker Token would be how licensees, players, including prop-players and affiliates are compensated. Blocks in our blockchain would be produced through player activity, and awards to be based on rules governing poker, such as rake, rake-back, commissions, royalties and other mechanics to produce revenue. The blockchain data allows for transparency and verification of correct results and payments. The blockchain would also publish information on players (non-personal details), and thus, be accessible for

external people to verify the integrity of the game, , anomalies, security issues and even to derive statistical research data.

The Poker Token Network would be open and transparent; allowing for players, licensees and other stakeholders to operate and use the network confidently. We aim to use encryption and high security, implementing Mental Poker [1]; a trustless peer-2-peer poker, using the very latest and greatest of encryption algorithms and methods for privacy (card secrecy) and security. Players will enjoy the safest of environments, with no central server that generates cards, and nobody knows the private cards of the players.

The issuance of the Poker Token would be as an Ethereum Token, wherein we would issue a total of 750,000,000 tokens. Each Token would allow the holder to earn a form of special distribution of cryptocurrencies and tokens from all rake and fees earned, buy services from the Poker Token Network, such as a white-label/license and also vote on certain topics via our governance protocol, implemented via Smart Contracts.

The business of a Poker Network

The very reason a poker network exists is due to the difficulties of launching a stand-alone poker site. In the gambling world, there are only a handful of successful larger stand-alone Poker sites in existence today. Among the notable entries are the Amaya owned Pokerstars and Full Tilt Poker and US facing Bovada (formerly Bodog)

Most gambling sites, when pursuing Poker as an option for their players, choose to participate in a Poker Network. It mitigates and lessens the startup risks of attempting to obtain an elusive point when a poker site has plenty of tables available. Critical mass is achieved when a poker site have around 600-800 players seated at any given time. - actually not that easy. Poker is a world affair with players coming from all 24 timezones of the world. Taking into account different players activity ,he/she may play somewhere around 3% of his available time in a month. Achieving 1,000 active players, you need at least 30,000 highly active poker players on the site. If you have a sportsbook/casino, and add a poker player, maybe only 25-30% of the players are active poker players. This means that you can only attain a critical mass when you have in excess of 100,000 players actively playing on the site. It is thus very difficult to launch a stand-alone poker site.

A poker network on the other hand- aggregates a plethora of smaller gambling companies participating with their players in building a critical mass.

By creating a strong Poker Network; we will attract a large swath of the crypto-gambling sites that need Poker, as well as also open up market channels to existing gambling sites, whom are just entering into the crypto-gambling market. We firmly believe that our open data protocols, cryptographic Transparency and our embrace of cryptocurrencies will make way for players and operators to love the concept

and secure the success of our Poker Token.

Revenues of a Poker Network

There are two traditional revenues for a Poker Operator: Rake and Tournament Fees. Tournament fees are simple: if a tournament is listed as a \$90+9, this means it charged the player \$99 to enter,\$9 is tournament fees that go to the network and \$90 is directed to the communal winning pot- this split between the players that place on winning positions.

Rake is earned on ring games (poker term for cash games). It's a bit more difficult to calculate. For every hand that is played, the Poker operator takes a fee from the winning pot. If the Rake is 5%, and the pot is \$100, the rake is then \$5.

The Rake is calculated on how large the pots are, how fast the hands are played and the number of participants etc. As a general rule of thumb; on a 5% rake schema, with a small blind of \$1 (big blind of \$2), the rake is roughly \$10+ per hour per player. If you have 100 tables, with an average of 6 players per table, with an average small blind of \$1, the revenue per hour would be: 100 * 6 * \$10 or \$6,000 per hour. It's no wonder that the behemoth of online Poker, PokerStars, have revenues reaching into billions each year.

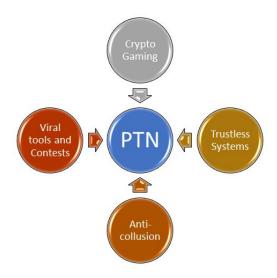
Our own revenue targets aim at gross revenues of \$10,000-\$20,000 per hour after 12 months from launch date.

Further benefits of the Poker Token Network

Beyond assisting in critical mass issues, a Poker Network has additional benefits. One of those is being able to create more frequent, large prize tournaments. Tournaments today are an important element of the Poker Business; many players want to emulate the win of Chris Moneymaker and others, to become another Poker millionaire by winning a large tournament.

The Poker Token Network aims to go over and beyond this prize structure. PTN will create massive tournaments, with mult-million dollar prizes. Right now, the estimated winning prize is roughly \$12,500,000 for the grand prize tournament. Poker Network will routinely have have \$100,000 to 1 million dollar tournaments- a great promotional message for any gambling site that chose to join PTN.

Reasons to choose the Poker Token Network



We will without question offer the standard tournament structures. Our experience and research has shown that the biggest marketing driver for most players is life altering. Life changers like simultaneous fame and fortune is paramount.

Attaining a critical mass

- Day 1- the challenge. Imagine the Poker Network has 20 Licensees and many empty tables. The first 200 hundred players needed for opening credibility are difficult to produce. This issues traditionally has been solved with the following tools.
- Prop Player Programs. Prop players are basically paid players paid a small fee to play, no rake with other potential benefits.
- Community Promotions. Awarding players contests prizes, such as 'the first players to reach 10,000 hands' and other type of tools have been successful in the past to attract players to play frequently and early, even before the poker tables are filled up.
- Viral mechanics and tools. Invite tools, such as email downloading, whatsapp direct invite links along with incentives for players that invite free plays, bonuses, leaderboards with prizes etc.
- Bots. These are automated programs that emulate how a player would play. Not recommended, in our opinion, but other Poker sites and Networks have used bots to fill up seats. We will more than likely not opt for this solution.
- Advanced poker clients, with features allowing for faster game play, over more

tables at the same time.

We also have another toolset for which we are unique, as far as we know at the time of writing this document:

- Aggressive, smaller tournaments (sit-n-go's) in ladder format, with a large prize. Free entries are awarded for players that play rake-carrying tables.
- Social Features; invite mechanics, and use social game mechanics, including viral game mechanics to get more people playing in groups.
- Poker Tokens. We will allow the early players to achieve a greater reward; even earning Poker Tokens for participating in early formation of unique tables, and especially for participating in critical mass building. By setting aside a number of Poker Tokens, we firmly believe this is a key to build critical mass.

Poker Network – Sources of Players



Of course, as a Poker Network, we concentrate on how many players we get in via our licensees; the more licensees we have; and total amount of players we can attract, the the more powerful a start for the Network.

Licensing a poker product is quite expensive, in both setup fees and royalties, with minimum fees being \$40,000 in setup and \$15,000-\$20,000 a month, and a more more typically costs range from \$75,000-\$150,000 in setup, \$25,000-\$35,000 in minimum monthly fees. While that shouldn't be much for a gambling site, it's a diversification strategy for many and during the startup phase, it would represent a

million dollar cost point before reaching a break-even revenue stream from their poker investment.

In order to show how the Poker Network values its licensees that truly assisted in building a network value, we will then promote the Network to the community, by not only waiving the fees, but also granting Tokens to the licensees that bring in the players.

Those players in turn, the first ones that fill up the tables, would be treated as prop players, themselves earning Poker Tokens.

We would also have contests among players and affiliates, granting large prizes for users winning leaderboard contests for various critical mass activities, such as playing the most hands, most rake accumulations, inviting most friends and so forth. Viral marketing is a key aspect of a successful launch and is a cornerstone of our marketing strategy.

In cryptocurrency terms, here is a meter; each hand played is a unit of work; everyone that participates in that unit of work is awarded a compensation.

In addition to the Crypto-gambling community, our team has been working in the online gambling field for 15+ years. We now aim to promote the product beyond the crypto-gambling community to past licensees, collaborators and operators in the cash gambling world.

Thus we believe that with aggressive application of the above listed strategies, we can attain key numbers of players within 100 days of launching.

Poker Client

Many ICO's are purely API based offerings, with no real client for end users. We believe that this is a huge mistake. While the technically sophisticated users of cryptocurrencies understand and can even make use of an API, we firmly believe that by creating accessible and user-friendly interfaces for end-consumers, we can reach new clients, outside of the very technically sophisticated. We have therefore created our own client UI's that any licensee can use and deploy, for immediate usage, and for any type of end user. In this Poker Client, we offer a number of unique gambling features that we believe will convert more customers to our licensees sites and poker offering. Key elements are; conversions, ease of access and quick entry to gaming tables.

For the comfort of a licensee, we have created to-go-kits, where a website installation can be done via simple drop-in's of javascript components, and a customization of colors and logos that can be done in mere minutes.

Players that come via an online Poker site, or being completely novice, will be able to use our User interfaces that have been engineered to be user friendly, catering to the whole range of players ranging from new users to the most advanced. For mobile phone users, we've created an HTML5 app. This facilitates installation for the modern smartphone user with HTML5 webviews capability. Any licensee of the

poker network can also choose to get our brandable phone clients.

Beyond that, the players themselves are the ultimate judge of the usability of the applications, which is why design and usability are key issues we have worked hard to solve...

Industry-Leading Client Design and Usability

The hard work we've put into creating balance between usability, visual presentation, immersion and speed of play, have even the most jaded operators calling our poker client "the best they have every seen".

Coupled with strong community features like uploadable player avatars (consistent throughout the platform), profiles, groups, blogs, forum and chat, our poker front end creates a feeling of an actual thriving community –Enhancing involvement with the game.



Unique Hand Showdown



The hand showdown is an important aspect of the player's perception of the game. In many types of online poker rooms, the showdown happens in a fraction of a second. As the pieces of information about the hand are displayed in several locations on the screen, this makes it difficult for players to understand the results of the hand.

Our hand showdown is both rapid and easily understandable. We display the winning hand, and directly link its description to the cards that comprise it (see above). This visual method of showing hand results is more quickly understood than just a simple text description of the results that many of our competitors offer. Ultimately, the game has a face to face spontaneity and directness lacking in the competition.

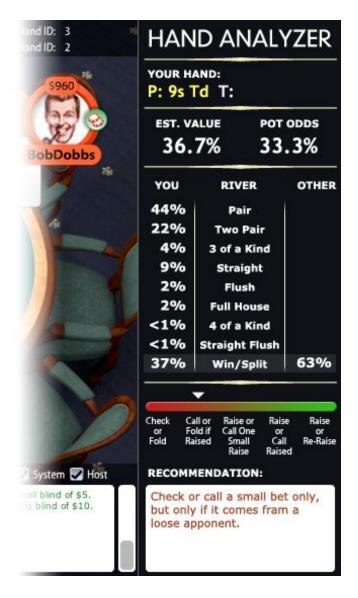
This method of displaying hand showdowns allows us to rapidly move gameplay to the next hand while maintaining all player's understanding of the results of the recently played hand.

Hand Analyzer

Beginning players sometimes face difficulty mastering the games. In order to assist and educate new players, we've created an integrated Hand Analyzer that sits adjacent to the poker client.

The Hand Analyzer gives confidence to weaker players just starting to learn the game – and increases the likelihood they'll turn into long-term, paying customers.

Similar hand analyzers are offered for sale by 3rd-party software developers to be used with online poker networks. By providing such an analyzer for free, we intend to increase our conversions and retention ratios: Newer players will be attracted to a client that provides them the tools they need to stand on a level playing field with more experienced players, and by increasing the quality of their game, they'll be less likely to wipe out their initial deposits and leave to try other online entertainment.



Multi-table features

Many users want to play on several tables at the same time, especially if they play a tight game (playing only one out ever 4 or 5 hands to the flop). Many power-users play on 4-8 tables which in turn greatly help to build a critical mass, wherein 100 power-users playing at 6 tables fill up 600 seats.

We have created several versions of multi-table apps; allowing the users to pick which they like and want to use.

API's and Clients

The Poker API is really quite open; using JSON as a communication mechanism. We chose this type of open communication that allows for external developers to create new

Clients for our games. By bringing in the developer community into our mix, we foresee that this will allow for a flourishing plethora of clients, game's, features and even new inventions. To award developers, we will pay them royalties from the revenues produced from the users that chose to use their clients, features and inventions.

Client features recap

With the ease of deployment, licensees will enjoy quick and easy setup on their sites. With html5 play available on just about any device, Web browsers and phones alike, with a payload loading in less than 5 seconds on a normal cable modem will allow players to have the speed and ease-of-access that they deserve..

By having a very accessible and configurable user interface, along with features such as the Hand Analyzer, we feel that advanced players as well as new players will find the experience inviting.

An intuitive multi-currency exchange mechanism will help any player quickly achieve what they want; a quick and easy way to enjoy the game of poker.

Performance and server technologies

While a good front-end client is important, multi-player games demand lightning fast performance, which in turn leads to lower operational costs for the network infrastructure.

The Poker Blockchain

We have created a blockchain for Poker Data; wherein all Poker activity can be tracked. Our structured format allows for people to analyze the fairness of the game, including hand data and randomness. We also intend to allow access to easy to use query tools for researchers that don't want to install a blockchain applications and/or who don't want to download a multi-terabyte database.

In order to protect identities, we will store hashed versions of their personal information, including a somewhat obfuscated IP information platform where researchers can look at the nearness that determine collusion and friendly play patterns.

People who have followed online Poker have heard about the scandals in the past, including Absolute Poker, Ultimate Poker and Full Tilt Poker. Security for most is paramount, and our Poker Token Open Data is a first step in allowing for more transparency for players, security analysts and researchers.

But how can we go even further? In making sure that nobody can see what cards any single user has we have answered with a quite advanced solution now in deployment.

Mental Poker

One of the ultimate goals for the Poker Token Network is to create a fast, usable and deployed version of Mental Poker [1]. For those of you that have never heard of Mental Poker; it's what a serverless implementation of Poker as it is commonly called, where radical forms of encryption are utilized to make sure that private cards are truly private and card shuffling is fair. The cards are known only to the player, and not even operators of the Network could know the private cards. It was first proposed by Shamir Et et al in 1981 [2].

A truly scalable solution for any type of computer based problem depends on how you can distribute the computational problem, as well as the performance of each node in the computational cluster.

With the advent of peer-2-peer technologies, a slew of new protocols have appeared, such as bittorrent and bitcoin. Such new thinking; allows for , the members of the network, to collectively determine ability- which , has become a new paradigm in the world of computer science. Peer-2-peer networks also distribute the load to clients, such as with BitTorrent where bandwidth and diskspace is shared among the peer group.

Peer-2-peer technology piggy backs on communication protocols allowing for users to communicate independently of a server, with each other. As such, peer-2-peer is truly serverless, and represents scalability. Point in case being BitTorrent and Bitcoin, both operate without any centralised server. Bitcoin handles millions of transaction each month, all using the client's computer and internet. BitTorrent is also responsible for multiple petabytes of file transfers each month without requiring any central server that distributes the traffic.

In order to create a gambling client which is peer-2-peer, you must have the aforementioned communications protocol. As of 2 years ago, no such protocol existed for web browsers. Now it does, with the advent of WebRTC. Without going into detail, WebRTC is a new specification that is implemented into modern browsers. It allows for getting data- including audio and video over peer-2-peer connections.

By combining the power and concepts of encryption, those pioneered by the researchers in encryption mentioned, along with the peer-2-peer projects already described, it is fully feasible to create a poker client, which instead of leaning on a central server, uses technologies and ubiquitous web browsers such as Google Chrome and MS Edge.

Benefits

A poker system that is completely serverless comes with a plethora of benefits:

- Performance. Since there are no server hits, the possibility of running millions of tables at once can be a reality, on particularly modest hardware.
- Security. With well known cheating scandals documented, we have learned that corrupt operators have seen the opponent's private cards. This was possible with a centralized server where the operator is viewing what cards were dealt. With this model- that where there is no central server, it is impossible for an operator to view what cards have been dealt in a hand already in progress.
- Business opportunities via scalability; as part of performance, you also have scalability, this opens up very interesting business opportunities.

Our implementation

We have a working implementation for Mental Poker, . Without delving deep into implementation details, we use homomorphic encryption, that can be implemented with javascript. By using algorithms such as a modified ElGamal, along with elliptic curve keys to shorten the key sizes and thus greatly improving performance to check for duplicate cards and lessens the network traffic required.

Obviously, for the initiated, Mental Poker is not the most performant of all, but we feel that our approach, creating a mixed environment, allowing for players using trusted third party servers when they want the ultimate in performance, and for the players using the Mental Poker implementation, when they require full decentralization, they can have a truly serverless environment. With the sole intermediary function of handling the payments (for payments and winnings) that are implemented as Smart Contracts.

We are constantly working on improving the speed of our Mental Poker implementation; and with increasing internet bandwidth, combined with strong peer-2-peer network layers, Mental Poker should soon be very comparable to the speed and usability of any other poker implementation- including those of trusted third party servers.

Mental Poker – Shuffling Scheme



This solution is quite acceptable, although heavy on traffic.

Our initial release of the Poker Network contains various types of security and encryption solutions; one such implementation is DPE (Dense Probabilistic Encryption), with a slight twist. As well as a full blown Mental Poker implementation with our modified ElGamal scheme- this along with a trusted third party shuffling solution. By creating a mixed environment, we give the users the setup they've been looking for.

The Poker Token

We intend to issue 150 million Poker Tokens to the public in the first round. Of the Tokens not sold in the Initial Offering,we intend to use the other tokens in the following manner: 200 million poker tokens will be held as float for players who play in other currencies, such as Bitcoin, Ethereum and other currencies. 200 million tokens will be issued as awards, rake royalties to White Labels and Licensee Holders and special premiums for prop players, for contests bonuses, for extraordinary awards and to founders and key employees. 250 million tokens are held in reserve for growth/marketing measures, which will be released only through governance voting and fixed conditions.

Each token holder will be able to:

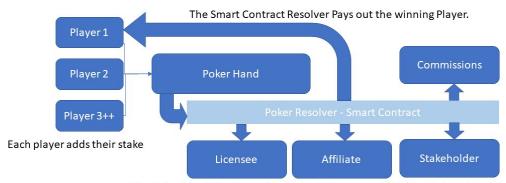
- Play on the Token tables and in tournaments.
- Purchase a whitelabel to launch their own poker room.
- Be part of the Licensing Quorum, whom control the issuance of whitelabels.
- Vote via our governance system on community issues and directions.

To earn income, such as a White Label or License Holder, and to vote via our governance system, the tokens must be submitted to a Smart Contract. Licensees also earn revenues from the whitelabels, where two pools are established. The global pool and a direct referral pool. If you as a licensee holder refer a whitelabel, you will be entitled to a part of their revenues. Licensees are granted voting abilities, as they influence the White Labels. In the case of Voting, the tokens will be locked up for a period of time (1 month min.).

Here's an example: if a Poker Token holder wishes to use 10,000 tokens- he can use the Tokens and deposit them into a dedicated smart contract wallet. The Poker Tokens are held via a smart contract and this would give the user 10,000 votes, one per token held. There is no minimum amount of tokens to be part of the Licensee Quorum. White Labels, however, have a minimum that is fluctuating, based on voting and other aspects. the minimum to be a White Label will be disclosed on the PokerToken.com/.io.

The token holder, if they are a software licensee holder, or if they are a white label holder, would also receive a corresponding share of the Poker Token Network revenues. Please review the following graphical representation how it would work for ring (cash/token) games:

Poker Smart Contract



The Poker Smart Contract also pays out Licensees, Affiliates, Stakeholders and other forms of commissions.

As you can see- the Smart Contract accumulates and distribute out all winnings to the stakeholders, those earned from rake and other revenue sources and, it pays it out to the intermediary accounts of all possible revenue earners; from Licensees to Whitelabels and Affiliates, Token Holders and other Commissions based on [Smart] Contract and other agreements. While graphically somewhat simplified, the Poker Engine itself uses the cards, and the crypto-proofs of cards to settle the winnings, commissions and other sums.

The specialized blockchain data the Poker Token network produces contains all the mathematical and participatory proof to ensure that the game and operational aspects are fair game for everyone.

With the PTN Governance System, we are using a voting system for the overall direction of the Poker Token Network wherein our Token Holders can chose to vote on a wide variety of topics such as:

- Feature deployment orders.
- Changes in rake and tournament fee structures.
- New tournament models, with seeding features.
- Issues regarding White Label deployments, rules etc.
- And many other important topics.

We intend to be transparent for the operation of the Poker Token Network and allowing our token holders to influence through their voting. We want the community to help us determine the direction we should steer in now and in the future.

One of the most obvious uses of the Poker Token is to play the game with the tokens. For any external players, we have a direct exchange mechanism; wherein Bitcoin, Ethereum, Monero and Dash (among other) cryptocurrencies can be deposited and transparently be exchanged into Poker Tokens.

Every day on any Poker Network, 10's to 100's of millions of dollars changes hands. Players deposit and withdraw. The Poker Token Network will be no different. This is why we are adding upwards of 200 million tokens into a reserve; which is used for what we call the "Player Float'. The mechanism of the float is to avoid intra-day fluctuations of exchange rates of the Poker Token that translate negatively. We intend to see that the Exchange mechanism does instead help to further the price development of the Poker Token.

We will do this by adding a small, very manageable fee of sub-1% for any exchange of a Poker Token to-and-from any other currency, all done within the network itself. Due to the high turnover, it will create a small, but noticeable deflationary status of the Poker Token beyond what the growth of the Poker Token Network itself creates. Since we will have an internal market, for buying and selling Poker Tokens, we will allow for Poker Token ICO investors to sell their tokens in the internal market. Early investors will be able to sell the tokens at a price premium, at a slight price above exchange market rates. The internal market selling option will be activated once the player liquidity provided exceeds 20 million USD worth per day in token needs.

ake and tournament fees are direct revenues for the Poker Token Network. An established Poker Network can earn revenues in excess of \$20,000 per hour or over \$14 million a month. These revenues are what Licensees and Whitelabels earn as part of their profit.

Example: if we produce net profits of \$200,000,000 (expressed in fiat for simpler calculation), and a PT Licensee holds 1% of the tokens, the licensee would be entitled to a special distribution of \$2 million. We calculate this is in close to real-time via our Poker Token Smart Contract. However, to be fair to everyone, anyone that is considering to be a Licensee, and wants to earn this special payout must commit his/her's tokens to a Smart Contract that has a certain execution date. We intend to issue the payments for

time periods of 3 months followed by the execution of special earnings once every quarter.

The value development of the Poker Token

Understanding how quickly the Poker Token can go up in value is crucial for any token holder. To give you an idea how the Network will grow, and also, when Marketing Tokens are released, it is done in such a manner that the value should go up, not down. If you are interested in being a licensee and white label, due to the value escalation, it is quite important to consider such positions early.

Avg. player count	1000	1500	3000	5000	7500	10000
Avg. rake/player/hour	\$4.50	\$4.50	\$4.50	\$4.50	\$4.50	\$4.50
Revenue per day	\$108,000.00	\$162,000.00	\$324,000.00	\$540,000.00	\$810,000.00	\$1,080,000.00
Rake per month	\$3,240,000.00	\$4,860,000.00	\$9,720,000.00	\$16,200,000.00	\$24,300,000.00	\$32,400,000.00
Tournament players/day	7000	10000	20000	30000	50000	60000
Avg. tournament fee	\$5	\$5	\$5	\$5	\$5	\$5
Tournament revenue/month	\$1,050,000	\$1,500,000	\$3,000,000	\$4,500,000	\$7,500,000	\$9,000,000
Total revenue	\$4,290,000.00	\$6,360,000.00	\$12,720,000.00	\$20,700,000.00	\$31,800,000.00	\$41,400,000.00
Estimated costs, affiliate % etc.	50%	50%	50%	50%	50%	50%
Total tokens	500,000,000	500,000,000	500,000,000	500,000,000	500,000,000	500,000,000
Distribution/token	\$0.0043	\$0.0064	\$0.0127	\$0.0207	\$0.0318	\$0.0414
ROI/Month	8.58%	12.72%	25.44%	41.40%	63.60%	82.80%
ROI/Year/Pro-rated	102.96%	152.64%	305.28%	496.80%	763.20%	993.60%
Estimated value/token (P/E 15)	\$0.77	\$1.14	\$2.29	\$3.73	\$5.72	\$7.45
Estimated value/token (P/E 30)	\$1.54	\$2.29	\$4.58	\$7.45	\$11.45	\$14.90
Estimated value/token (P/E 50)	\$2.57	\$3.82	\$7.63	\$12.42	\$19.08	\$24.84

As shown above, this simplified spreadsheet- explains how the value/token changes based on how many players the network gets in. The Avg. rake per hour and what the PE the community will gives us is all assumption. A PE of 15 is conservative and a PE of 50 is assumed to represent a very fast growing company. While we use the terms of PE and ROI, it is merely as a comparison to a traditional company. Anyone buying the tokens should be aware that we are not a traditional company, but rather, the Tokens are issued in accordance to a structure of a DAO/DAPP. The Distribution/Token is a figure of what we estimate that Licensees and White Labels would earn in avg from their efforts and participation.

The average player count is based on milestones, but 3,000 should be considered a middling success for the Poker Token Network. If we grow fast and attain a PE of 30 on the open market, each token should be worth approx. \$5, or 50x the initial price. The special distribution paid out to token licensees and white labels, would have an estimated ROI on a yearly basis of over 300%.

Beyond the revenues produced and our extraordinary methods of distribution of revenues to the token buyers, the player activities will also increase the value of the Poker Token. the Poker Token float is capped. The more people that hold it and pay a premium for every time it changes hands, this will serve to drive up the value. Limited resource; the seller that gradually increases price = token value increasing.

When we sell each Poker Token to end consumers, the players will buy it at a 0.75-1% price premium. We'll earn the tokens back from the players via Rake and tournament fees in the network and contribute portions of that rake to our token holders participating in our distribution program.

Thus, with every turnover we have, the public float will decrease and increase its price due to diminished public availability of the tokens along with a public price escalation model.

Poker Token value is expected to be well over \$10 per token when we are at the 3000 player milestone due to said dynamics, instead of the otherwise estimated value of \$5.

Depending upon marketing, sales, promotions and community acceptance, the goal is to achieve a 3,000 player milestone within 6-18 months of our launch.

If the token value at that time exceeds \$10, based on distribution, and player pricing model geared towards increasing price, the decrease of the public float- we foresee that early Token Holders, such as Licensees or White Labels will have achieved a ROI of 100-200 times their original investment.

Without foreseeing when this can happen, this would mean that that upon reaching 20,000 players that the initial Poker Token buyers will have achieved an ROI of a 500-1500 multiple.

Poker Token is a vehicle for entrepreneurs and players; where effort and skill count; and add value collectively to the network, while making your own tokens make money for you. .

Further benefits for VIP Holders.

As previously mentioned, all Token Holders will have access to our special features, such as Licensing, White label, and other programs. However, we recognize that the high-value investors are key to our success. We have therefore instituted the Poker Token VIP Token-holder program.

Among the benefits of being a VIP are the following:

- Yearly get-togethers with the Poker Token Mega Tournament and party, with entries to the tournament that offers a 1 million dollar first prize. (Silver, Gold, Platinum prize structure)
- Invitation to the Platinum Event. (Platinum)
- Invitation to the Gold Event (Gold/Platinum).
- Other online high value special tournaments access. (All VIP levels)
- Special investor access for key members of the Poker Token team and the VIP account manager. (All VIP levels)
- Access to our early-bird information news; get the Poker Token news first of all.
 (All VIP levels)

To qualify for the VIP program;

- Bronze: min. An initial holding of tokens corresponding to value of \$7,500
- Silver: min. An initial holding of tokens corresponding to value of \$10,000
- Gold: min. An initial holding of tokens corresponding to value of \$15,000.
- Platinum: min. An initial holding of tokens corresponding to value of \$25,000.

It should be noted that NONE of the special events costs will be paid by Poker Token Network revenues for the first 2 years of operations. The cost of events will derive from the initial sale, making sure it having no impact on Token values, special distributions or operational costs and considerations.

The future of Poker Token

The team behind Poker Token are professionals in gambling and gaming, beyond Poker. The intent is not only to launch the Poker Token, but also crypto-token concepts

for Betting, Casino, Betting Exchange, Bingo, special social gaming vehicles acting as a marketing vertical and other concepts.

We see that the token concepts will develop for specialized industries, such as gambling, poker and betting. Highly targeted, industry specific tokens will be the norm, wherein Bitcoin and Ethereum will serve as a settlement layer between those specialised tokens, this due to their liquidity. We intend to be on the forefront of that development and in particular- special competency which is cryptocurrency gambling.

As we explained, the betting world is big; Poker is just one part of it. We have developed, deployed software and operated sites for all of it- and this is what we will bring to the crypto-world; a concept that encompasses any and new methods and visions for the Gambling market. For anyone that has followed cryptocurrencies it is well known that for Bitcoiners (and other crypto-currencies), gambling is one of the absolute key markets, representing a large percentage of all crypto-currency transactions, second only to speculative, investment and exchange transactions.

A gambler will often play multiple types of games; not just poker, By using a multi-pronged approach, we will dramatically increase revenues and profits by extracting more revenue on a per-player basis, increase conversion rates and decrease churn.

For the purpose of executing this, we intend to issue other tokens, each representing the specialized purposed vehicle for the activity. One such token will be a Betting Token, another will be a Social Gaming Token. Each will be launched as a token under the ALEATORIC brand. For more information, please see http://www.ALEATORUM.com

How does this relate to the Poker Token? The synergistic effects obtained from launching other products will help the Poker Token to gain in value. Beyond that effect, we will also give away tokens in future token projects at a rate of 20% of the amount purchased in the Poker Token Initial Token Offering.

The Poker Token's early buyers will also be given deep discounts for the ALEATORUM GROUP's future Token Offerings and ICO's, for being apart of the early investment group. The discounts will vary but will be deep. 25-30% in discounts will be offered based on the amount of investments already made into Poker Token. For example, if you invested 20 ethereum, or about \$6,000 (at a value of \$300/ethereum), you would be entitled to discounts of 25-30%, and for investments of up to 40 ethereum a discount of 12.15-15%.

We of course value our early ICO investors; you are the ones that helped nurture this concept into a success; and Poker Token, along with other ALEATORUM launches will work in concert for you, for the short and the long term.

Among other product launches from the Aleatorum Group is the following:

- Sports wagering and Casino solution, based on our platform that has a track record of billions of dollars in past wagers.
- Bingo network. Similar principle to that of the Poker Token network but applied to the world of online bingo.
- Social Gaming; games for fun, blockchain based advertising and lead generation revenues. Games for the masses.
- Live Wagering and Exchange. Betting on live events and player against player. Adrenaline and fast paced betting action.
- Game Services. A distribution platform for game inventors to distribute new games to whitelabel partners. Whitelabels get new games, inventors get distribution. A win-win, all governed by smart contracts and fair settlement practices.

To launch all products at the same time with the same token would be a daunting task. A task that would require a staff of 250+ people. We chose to separate the launches while seeking future synergistic effects as an enterprise. Giving free tokens and heavy discounts for our Poker Token investors into the subsequent launches. By offering free tokens and heavy discounts, we feel that the model we offer is fair for early investors, these decreased risks and reward structure leads to a mutually progressive path.

It should be noted that the next launches will have a smaller market cap, hence, the free tokens awarded will represent a correspondingly larger share of all tokens.

The team

Our two founders come from long careers; Oliver B, with a background in economics and finance, created payment processing companies from the mid 90's in Germany, and held titles as CFO, CEO and COO. Oliver also was executive for large gambling companies. Oliver also was instrumental in taking these companies out on public markets in IPO's and also acquired private investments. In 2013, Oliver founded a

payment processing in the cryptocurrencies field, catering to some of the larger consumer focused cryptocurrency processing needs in the industry today.

Andreas H has a background as a software engineer and in applied mathematics. He started out by creating games in the late 80's and then moving onto software consulting with clients such as Ericsson, Microsoft, Oracle, HP and a whole slew of banks, focusing on payment processing systems, high throughput systems and applied cryptography. In the late 90's he founded another company which develops gambling software; such as Sports betting, Casino and, of course, Poker, in the capacities of CEO/CTO and main software architect. Andreas also worked with cryptocurrency solutions; as an investor, trader and in payment processing for the gambling industry in its infancy.

Formative assets from these companies and projects are the backbone for the Poker Token project.

We are moving over key team members to the Poker Token team with their 15-20 years of experience in development, design and gambling system deployment history. The team includes 5 developers, 2 designers/graphic artists, HR specialists, at least 12 customer support and management personnel in the initial phase. In 12 months, we target to have a staff of 50-80 people. We have set up operational companies and are moving to hire more staff even prior to the ICO's launc. The operational companies are in jurisdictions where seasoned domain experts can be found easily in the gambling and poker sectors.

Our team has highly relevant experience and a track records. Most important is that we have previously deployed gambling solutions which resulted into resounding successes. Our team with 20+ years of expertise in the field should be considered a force to reckon with as we were early innovators in the domains of Internet, cryptocurrencies and online gambling.

Corporate setup

While a crypto-tokens and companies in this sphere are virtual, we cross-over into the world of fiat currencies and legalities.

Poker is still gambling. While we operate a network, we are not the entity that takes direct deposits from the players- the whitelabel licensees do . In this scenario we are

acquiring a wide array of legal structures to protect the assets of the company. Among the jurisdictions we target for setting up legal structures are...

Luxembourg, for it's stellar reputation in the crypto-currency world. The BVIs, for legal protection and used by among others such as Bitfinex.

Costa Rica, home to a large segment of the offshore gambling industry and legally defined gambling.

Malta, where it's possible to get a passportable EU license to conduct a gambling enterprise.

We have targeted Costa Rica for our customer support center and a first gambling license, as it is home and been home to large poker companies, such as PokerStars, Absolute, Full Tilt, Bodog Poker (now Bovada). Finding trained poker experts in Costa Rica has been easy, and our staffing process will be fast. This will in turn lead to a faster launch, cutting down the time by as much as 2 months. The personnel costs are also lower in comparison to European and North American customer support. Our second target will be Malta in acquiring a Network license there. We estimate this to take 4-6 months from the launch date, but our previous CR license will be put immediately to use. Upon approval of a Malta gambling license, we will open an office in that jurisdiction.

Risks

We have previously explained the rewards and briefly touched upon risks involved in this venture. However, any decent business plan or ICO should contain a risk section. Risk assessment is pivotal for any investment into an ICO. Therefore, will try to disclose some of the larger risks the ICO and legal structure face, and how we intend to mitigate those risks.

Regulatory risks

ICO's are unregulated as per current legislation. However, it doesn't mean any ICO, including ours is immune to legal action from governmental agencies and bodies. Such legal action could have serious detrimental effect on the ICO as it would tie up valuable time and resources in a legal fight. To remedy and mitigate that risk, we are based outside of the US and will purposely operate in jurisdictions that are of a more open legislatively and in their legal action approaches. While this may not entirely remove such risks, we are confident this creates a risk diminishment effect as we are not an imminent operational or existential threat.

Hacking and other IT-threats.

Anyone investing and dealing with crypto-currencies are aware that hacking and thefts of bitcoin, ethereum and other tokens have occurred quite frequently. We are not immune to such threats. We intend to mitigate such risks via an approach to security that we have had for a long time, through our dealings with huge transaction volumes of mobile billing companies, credit card companies and processing gambling transactions. The approach is to grant access to a very few trusted individuals, to use security for internet connected computers that is behind firewalls of the utmost quality, to use encrypted databases and tunnels to communicate, and to have most crypto-currency funds in offline wallets.

Legal risks vis a vis Gambling

We are a Poker Network ICO, which means we deal with the tricky regulatory market of gambling. While it's a lucrative market, we must deal with an entangled legal structure that is difficult to navigate., We will mitigate this risk by having legal structures that deal with licensing in disparate jurisdictions such as; Costa Rica, Malta and others. We are reserving upwards of 1 million dollars for potential licensing costs.

Competition threats

Competition is always a challenge for any business starting up. Few and far between are company start-ups that are so unique that no company can ever compete with them. We are a Poker Network among other Poker Networks; What sets us apart and mitigates this potential challenge is the following: we intend to use the ICO as a vehicle to gain funding and liquidity for our tokens that we can use the tokens to have viral and directly paid contests, prop-player programs and other features to attract new users and thus surpass the threshold to a critical mass. Our particular uniqueness in the multi-billion dollar crypto-gambling world will give us a fundamental edge. We intend to grow and keep our critical mass intact by adding new features and new contests at a rate that convinces users to come in and continue returning at a rate strong enough to make the network grow. Another way to keep competition at bay, and maintain a critical mass, is to constantly develop our list of white-label partners. We will have a dedicated staff,

acquired from competitors, that will help us sell our white-label solution to an ever expanding list of partners.

Blockchain and Cryptocurrency risks

Leaning on external software and payment systems like cryptocurrencies can be rife with risks. The technology is new. Unexpected issues may arise. One common issue with Bitcoin, and lately, Ethereum payments are that there have been consequential delays in completing transactions;. Such delays stimulate player sentiment, with blame of such delays going to the company with a resultant loss of players.

Because the cryptocurrencies mentioned above are external entities, we can't directly resolve the delay issues and some other technical issues. This must be then considered to be important risk potential. We are and will continue to explore solutions to these issues, such as: striking important key relationships for off-chain settlements, adding more cryptocurrencies that are faster and that consider deposit payments from whitelabels for their controlled wallets. We are also looking at other blockchain technologies and smart contract platforms that may mitigate problems that may arise and weigh against technical and business issues that can arise from moving to other platforms.

Summary of risks and threats

These are just a list of the most important threats that we can perceive. As with any other business, there are many smaller threats such as recruitment, developmental, technical and "force majeure" type of threats.

Due to the risks related to this type of business, we ask anyone considering participation in our ICO to carefully consider the risks as stated above, as with any other type of investment. Any business that has a high return tends to be more risk-fraught,. We implore you to do your own research and invest accordingly with market data and conditions in mind. We have created this business proposal and plan based on our best research, data, experience and resources. This new and exciting field of activity is moving and changing at a rapid rate, and for those reasons our data may be less than perfect or up to the minute.

Project status

We have here within these pages described not only a plan; but a product with its unique challenges. We as a group have previously deployed many solutions for the gambling and payment processing industries, and use the same product suite as its core foundation. This means that we are ready for very quick deployment; we have backend structures ready to go, dependable customer service platforms and monitoring applications; all which have been deployed for the past 15+ years for various large gambling companies. This supports and warrants stability, an operational capability - and yes, a real value in the form of an intangible asset.

The Poker Token Network is positioning itself on an existing IP that is tested and vetted thoroughly; but has actual deployment conditions. While part of the intellectual property is new, such as the mental poker and that has not yet been deployed for end users, the poker client and the poker servers etc. have been in operation within a vast and deep backend.

While it's hard to estimate a value intangible asset, it could be safely recognised that the value of the intellectual property brought in is in the range of \$8-\$12 million dollars. This we believe puts us in a different category; apportioning a high value asset to the company, where most other ICO's surface with a plan to develop an asset which is a risk fraught enterprise.

Our relevant experience, from past deployments of technical solutions for the target industries (cryptocurrencies and gambling), along with an existing technical IP and infrastructure tool sets- this all compounds elevate our venture from all other ICO's. The other ICO's offer to plan, express the intent to develop and seek funds to create in future. We have already created, developed and forged our plan. Our core intention is to create an ICON->? to fund the launch, marketing and creation of a bullet proof Token success story in the gambling industry.

We foresee being in operational mode within 90 days from a closed ICO.

Not yet convinced? Go to PokerToken.com today and see for yourself how togetherwe've got game!

References:

- 1. Mental Poker; wikipedia article. https://en.wikipedia.org/wiki/Mental_poker
- 2. Shamir et al, whitepaper for Mental Poker. https://people.csail.mit.edu/rivest/ShamirRivestAdleman-MentalPoker.pdf
- 3. The Moneymaker Effect. https://en.wikipedia.org/wiki/Moneymaker_effect
- 4. Practical Mental Poker without a TPP based on homomorphic encryption. https://link.springer.com/chapter/10.1007/978-3-540-24582-7 21
- 5. ERC 20 Ethereum tokens. https://theethereum.wiki/w/index.php/ERC20 Token Standard