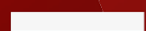




# cashbet coin

The world's only  
complete, crypto-ready  
iGaming platform



WHITEPAPER

THE CASHBET TEAM

For the latest version of the full official ICO whitepaper, visit

**COIN.CASHBET.COM**

V2.9 January 22, 2018

## TABLE OF CONTENTS

<b>Executive Summary</b>	<b>4</b>
<b>The iGaming &amp; Cryptocurrency Opportunity</b>	<b>5</b>
Today's Crypto Casino Challenges	6
Delivering on the Promise: Blockchain-enabled Processing for iGaming	8
<b>Operators: Launch a Complete iGaming Site</b>	<b>9</b>
Operate an iGaming Site End-to-End	9
Access to Quality Content	9
Elimination of Card Theft	9
Increased Liquidity	9
<b>Players: A Better Gaming Experience</b>	<b>10</b>
Greater Access to iGaming Content	10
Trust and Transparency	11
Responsive Game Play	11
Reduced Transaction Costs	11
<b>The CashBet Platform</b>	<b>11</b>
<b>Competitive Landscape</b>	<b>13</b>
Content Providers	13
Casino Operators	13
Crypto Casinos	14
Crypto-Casino Platforms	14
<b>The CashBet Coin Token: Utility</b>	<b>14</b>
CashBet Coin Token Utility: Partners & Players	14
CashBet Coin Token Utility: Owners	15
CashBet Coin Issuance and Management	15
Phase 2 CashBet Coin-in, Conversion, CashBet Coin-out	16
Phase 2 Conversion How and Why	17

## CashBet Initial Coin Offering

<b>Phase 3 - CryptoRGS</b>	<b>17</b>
<b>Phase 4 - Pay-As-You-Go State Channel Technology - CryptoGo</b>	<b>18</b>
Inner Workings of Micropayment Channels	19
Creating the Channel	20
Transaction Signatures	20
Hashed Timelock Contract	20
<b>Methodology for Warm Wallet Depletion</b>	<b>22</b>
<b>About CashBet</b>	<b>24</b>
Company Highlights	24
CashBet Team	25
Customers and Partners	31
<b>CashBet Roadmap</b>	<b>32</b>
<b>Token Sale</b>	<b>32</b>
Total Token Supply	32
Token Distribution	32
Token Sale Structure	33
Pre-Sale	33
Public Sale	33
Participation Eligibility Rules	33
Token Price Rate & Increase Schedule	34
Currencies Accepted	34
Token Issuance	34
Use of ICO Proceeds	34
Financial Plan	35
<b>Disclaimer</b>	<b>35</b>
<b>Official Sites and Pages</b>	<b>35</b>
<b>Document Revision History</b>	<b>35</b>
<b>Bibliography</b>	<b>36</b>

## Executive Summary

Mobile gaming and cryptocurrency are two of the fastest growing, demand-driven markets in the world today. CashBet is merging these technologies into an iGaming solution and issuing CashBet Coin to solve the problems facing crypto casino operators and players today: speed, trust, cost, and content.

CashBet is the only complete, crypto-ready, mobile-first iGaming platform with an established, profitable presence in regulated gaming markets. Launched in 2012, CashBet has tens of thousands of registered players, millions of Pounds Sterling wagered, gaming licenses in multiple jurisdictions, and customers from all facets of iGaming (real-money, social, and skill-based) from around the world.

- **The CashBet platform is uniquely positioned to set the standard in the emerging cryptocurrency iGaming space.** Architected and implemented by iGaming veterans, its modular, end-to-end iGaming solution reflects years of both B2B and B2C iGaming experience. It is creating a proprietary off-chain payment technology that will significantly reduce costs and increase payout speeds, making CashBet Coin the most desirable cryptocurrency in the iGaming market.
- **The CashBet platform is the only crypto-casino platform licensed in multiple tier 1 gaming jurisdictions.** The platform and all associated games - over 450 titles - have passed rigorous third-party compliance testing. It features a player and content management system, content distribution tailored for the crypto casino market, a geo-verification system, and a responsible gaming module, all of which can be licensed to crypto casino operators. It includes full support for Know Your Customer (KYC) and Anti-Money Laundering (AML) compliance.
- **CashBet is white-label capable.** CashBet empowers operators and developers to easily launch their own bespoke iGaming sites, content, and apps.
- **CashBet Coin ("CBC") tokens will be offered to token purchasers during an ICO planned to commence in January 2018.** The acceptance of CBC will democratize access to world-class entertainment for those underserved by the centralized banking establishment.
- **The phases of the CashBet solution** are as follows:
  - **Phase 1 CashBet Coin VIP registration.** CashBet registers players who deposit 1,000 CBC attain instant VIP membership and a substantial bonuses for gameplay unavailable to players not holding the 1,000 CBC balance.
  - **Phase 2 CashBet crypto gaming.** CashBet will convert CBC at the time of wager to a fiat currency and convert any winnings back to CBC at the same rate. This will make hundreds of games available to cryptocurrency players and operators.
  - **Phase 3 Direct CBC wagering.** CashBet enables wagering in CBC with no fiat currency conversion. In addition, Phase 3 will include the rollout of

## CashBet Initial Coin Offering

CryptoRGS, CashBet's content distribution platform for crypto casino operators.

- **Phase 4 CryptoGo Payment channel-based gaming.** CashBet's proprietary implementation, CryptoGo, is an off-chain<sup>1</sup> state channel-based payment technology. It will allow wagers and payouts made directly between players' ERC20 capable wallets and the CashBet platform without the need for a deposit account. This will allow immediate payouts and a significant reduction in fees.

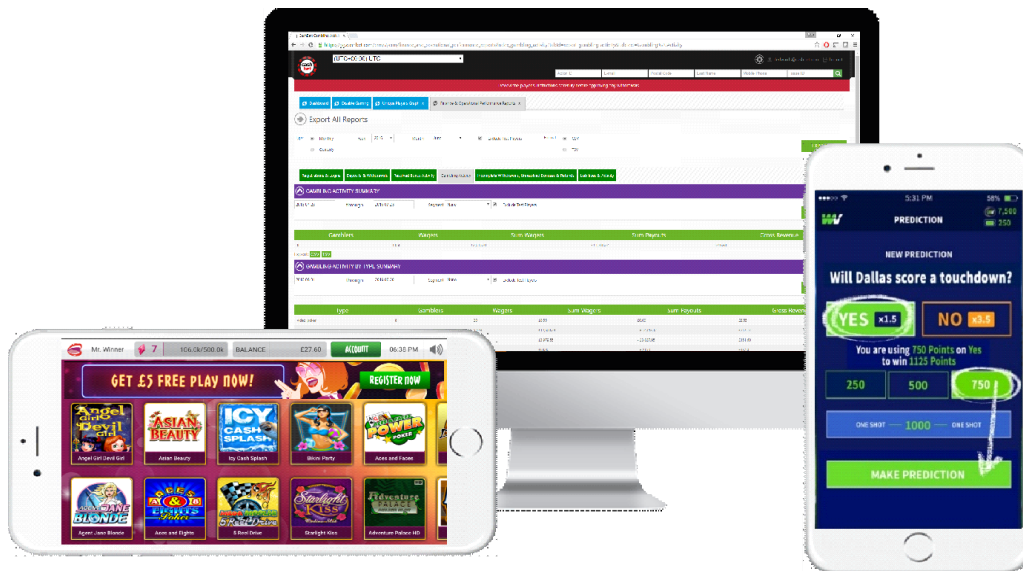


Figure 1 - CashBet's enterprise-grade software empowers operators to run mobile-first iGaming sites and apps

## The iGaming & Cryptocurrency Opportunity

The convergence of mobile gaming and cryptocurrency offers a unique opportunity for operators and investors to disrupt and prosper in the crypto casino market.

The gambling market has changed considerably in the last decade with the rise of online gaming and the shift of online from desktop to mobile. Mobile (mainly HTML5) content is now ubiquitous and accounts for the majority of CashBet's game play. Riding a still-rising surge in mobile gaming and growth in regulated jurisdictions, online gambling became a \$43B (USD) market in 2016. All types (social, mobile, real-money, crypto) of iGaming continue to grow rapidly. Mobile real-money gaming is the fastest growing segment of the online gaming market.

## ONLINE GAMING MARKET WORLDWIDE

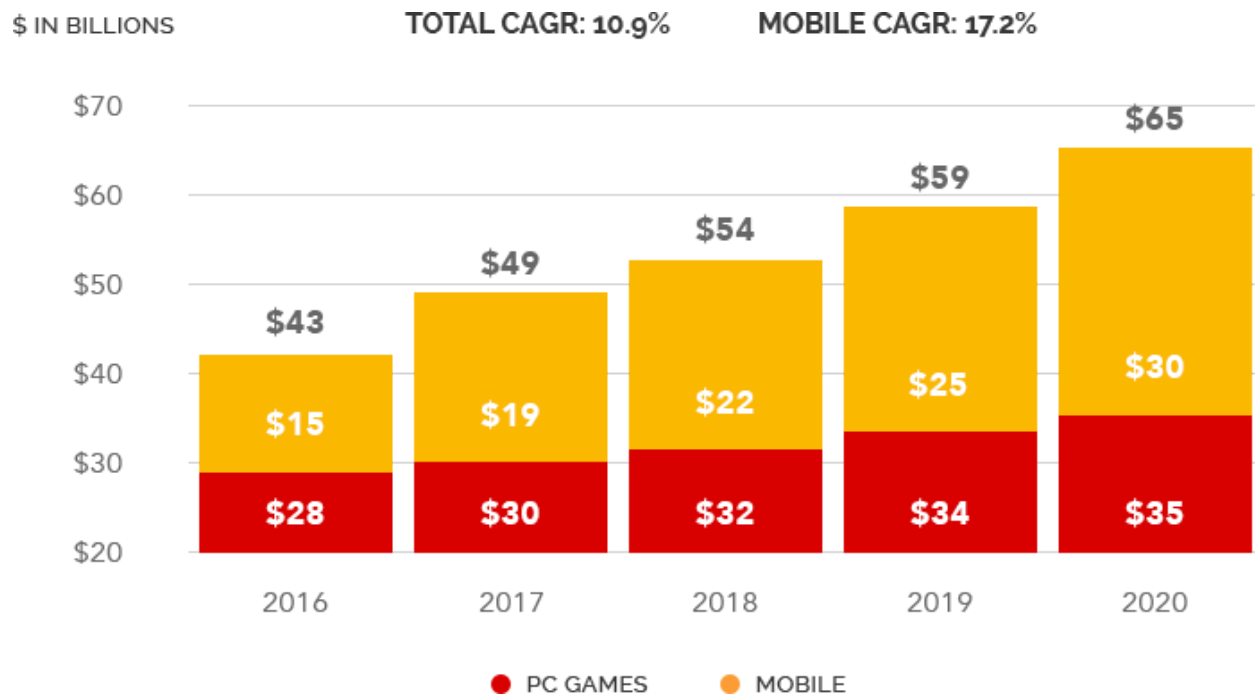


Figure 2 - The global mobile gaming market is surging and will accelerate with the mainstreaming of cryptocurrency payment methods.

At the same time, cryptocurrencies and their underlying blockchain technologies are white-hot and gaining acceptance on a growing list of reputable commodity markets worldwide.

### Today's Crypto Casino Challenges

Crypto-ready casinos are in their infancy. They face the following speed, trust, and cost challenges:

- **Cryptocurrency transaction costs are high and growing.** Ethereum transaction fees will continue to increase<sup>2</sup> as scaling issues with the Ethereum blockchain cause an increase in *gas prices* (the internal pricing for running a transaction or contract in Ethereum)
- **Smaller transactions are slow.** Because blockchain *miners* are paid partially with transaction fees, they prefer to prioritize larger transactions where the rewards are higher. Small transactions on the public blockchain can be

painfully slow. For iGaming, this makes posting each wager to the blockchain impractical.

- ***Crypto-casinos lack transparency.*** With the important exception of ‘provably fair’ auditable casino systems<sup>3</sup>, scant transparency of fair play exists, eroding consumer trust in game outcomes.
- ***Crypto-casinos lack regulation.*** Until recently, most Tier 1 gaming regulators have been unwilling to provide guidance that could bolster crypto-casinos in mainstream markets. As of 2017, the only respected online gambling regulator to issue licenses for the use of digital currencies and skins has been the Isle of Man (although Malta is testing cryptocurrency as of mid-2017<sup>4</sup>.)

In addition to these challenges, many fledgling crypto-casinos are repeating the flawed approaches of legacy iGaming companies. Among them:

- ***Not optimized for mobile.*** Most operators have not optimized their sites and apps for mobile and tablet devices. Those that have are building on existing legacy software platforms with “bolt-on” mobile features not optimized for the channel. These platforms do not take advantage of the key benefits of mobile hardware. And they typically cobble together 3rd party services to perform basic functions such as marketing automation and player segmentation. The end result is a sub-par user experience for a rapidly growing mobile audience.
- ***Lack of compelling game content.*** Legacy platform providers currently have no solution for content distribution in the crypto-casino space. Crypto-casinos are either developing and offering their own games (a strategy that failed in online gaming many years ago) or are turning to existing content providers without their knowledge.
- ***No licensable iGaming platform exists for cryptocurrency-based iGaming.*** As of August 21, 2017 there have been 15 ICOs by gambling companies<sup>5</sup>. None is using an iGaming platform developed and licensed by a reputable company with the basic controls in place needed to run a fair, reliable, and safe cryptocurrency online casino.

## Delivering on the Promise: Blockchain-enabled Processing for iGaming

Blockchain technology has the capability to disrupt the online casino industry by improving payment processing capabilities, increasing access to players underserved by traditional banking, and by providing a high degree of transparency and trust between casino and player. By introducing CBC and our blockchain-enabled platform, CashBet will offer features to operators and players that no other iGaming platform company can currently provide.

CBC will be the currency of choice on CashBet-powered casinos, used by operators to pay licensing and content fees, and wagered by players on great games.

CashBet Coin allows:

- **Lower costs.** Whether playing in fiat or cryptocurrency, fees for small transactions can approach an appreciable size of the transaction itself. In Phase 4, the CashBet platform plans to roll out CryptoGo, its proprietary implementation of state channel (payment channel)<sup>1</sup> technology to eliminate the need for wallets or deposits by facilitating instant wagers and payouts, using off-chain transactions. Normal gas fees for Ethereum blockchain transactions can therefore be greatly reduced.
- **Trust.** All CashBet games are third-party tested and licensed. In addition, the CashBet platform will be enabled for provably fair operation. Blackjack, roulette, and card game players will be able to independently challenge CBC wagered outcomes with a provably fair tool and review the game resolution source. For slot games, where the IP and mathematics of the game are proprietary, CashBet is considering alternative methods to engender anonymous trust.
- **Speed.** CryptoGo will enable faster payouts to players, shrinking the withdrawal processing time from days to seconds. Only the final state will be written to the root blockchain. By comparing the player's history, withdrawal amount, and other requirements, the player can be paid immediately in CBC.
- **Access.** CashBet Coin will democratize access to CashBet's world-class entertainment by enabling players in markets underserved by the payment card industry to wager in CashBet-powered casinos.
- **Empowered players.** Players have access to all their CBC transactions. Changes to public blockchains are publicly viewable by all parties creating transparency, and all transactions are immutable, meaning they cannot be altered or deleted.



## **Operators: Launch a Complete iGaming Site**

### **Operate an iGaming Site End-to-End**

The CashBet platform is modular, comprehensive, and fiat-and-cryptocurrency ready. Operators can brand their iGaming site, enable gaming content, and launch a crypto-casino within days. Operators also avoid the challenges and expense of integrating a back office accounting and player management system.

The CashBet platform provides everything operators need to run a licensed and profitable iGaming business: an integrated back office, game management, certifiably secure and transparent outcome determination, exclusive content availability, and deeply integrated know-your-player analytics. The platform comes with built in bonusing for player retention and currency management, as well as a geo-verification system which can be used to offer location-based bonusing or restrict play to a locality.

### **Access to Quality Content**

CashBet is already a leader in aggregating and delivering content from 3rd party RGS platforms, offering a large number of quality games to its operators. CashBet's blockchain-enabled casino will extend the content to include crypto-casino games.

CashBet's software and game development kits will extend the pipeline to new titles via CashBet's RGS and third-party content delivery platforms. And as CashBet deploys new content, it becomes available at no additional implementation cost to operators.

Thanks to CashBet native apps that manage and optimize HTML5 content for mobile devices, operators will be able to attract players with a superior gaming experience featuring stunning graphics and responsive, high-speed animations.

### **Elimination of Card Theft**

Operators accepting cryptocurrency payments on the CashBet iGaming platform will eliminate chargeback fraud, a pervasive type of fraud difficult to combat and typically accounting for a reversal of 1% - 3% of transactions on a monthly basis.

### **Increased Liquidity**

Liquidity is an issue every operator but especially smaller ones. A small liquidity pool limits what operators can offer and what players can win - a critical mass of players is crucial to success. Operators using the CashBet iGaming platform can increase their liquidity by legally offering wagering and payout in CBC.

## Players: A Better Gaming Experience

### Greater Access to iGaming Content

CashBet-licensed casinos will be able to offer more content to more players than other crypto casino operators. The CashBet RGS and CryptoRGS platforms will be leading content aggregators of fiat and cryptocurrency denominated games.



*Figure 3 - The CashBet platform will accept both fiat and cryptocurrency transactions using CashBet Coin.*

CBC will allow players in markets underserved by the payment card industry to play on CashBet-powered casinos. Disintermediation of banking providers will greatly increase access for players in emerging markets. These considerable markets include areas in Latin America, the Caribbean, and Africa where players are challenged by access to electronic payment networks (and where wagering is often transacted via cash and bookies).

## Trust and Transparency

CashBet-powered casinos will give players visibility to all their information and transactions. It will also empower players to challenge and prove the fairness of outcomes.

- **Transaction Transparency** - Changes to public blockchains are viewable by all parties.
- **Fairness** - CashBet will raise the bar for trusted outcome determination, meeting the strictest emerging certifications. CashBet will show players how to challenge discrete outcomes, using provably fair hash/seed calculators.
- **Regulatory Compliance** - CashBet is licensed by the world's most reputable online gaming jurisdictions: the Alderney Gambling Control Commission (AGCC license numbers 116c1 & 116c2) and the UK Gambling Commission (UKGC license number 39620). CashBet is in the process of obtaining licenses from the Isle of Man Gambling Supervision Commission (GSV) - the only whitelisted regulatory body currently (October 2017) providing detailed guidance and a regulatory framework for crypto casinos.

## Responsive Game Play

CBC gaming on CashBet powered sites will be more responsive than the crypto-casino competition. CashBet's mobile-first operation is streamlined for HTML5 operation and performs equally well on desktop, mobile, or tablet devices.

## Reduced Transaction Costs

CashBet platforms will eliminate fees for fiat currency deposits and payout transfers, so only the amount of the wager need be risked by players. CBC game play will use off-chain transactions, enabling instant wagers and payouts. These are captured in fully transparent microtransactions without incremental calls to the public blockchain. This reduces gas costs by cutting back on calls to the blockchain.

## The CashBet Platform

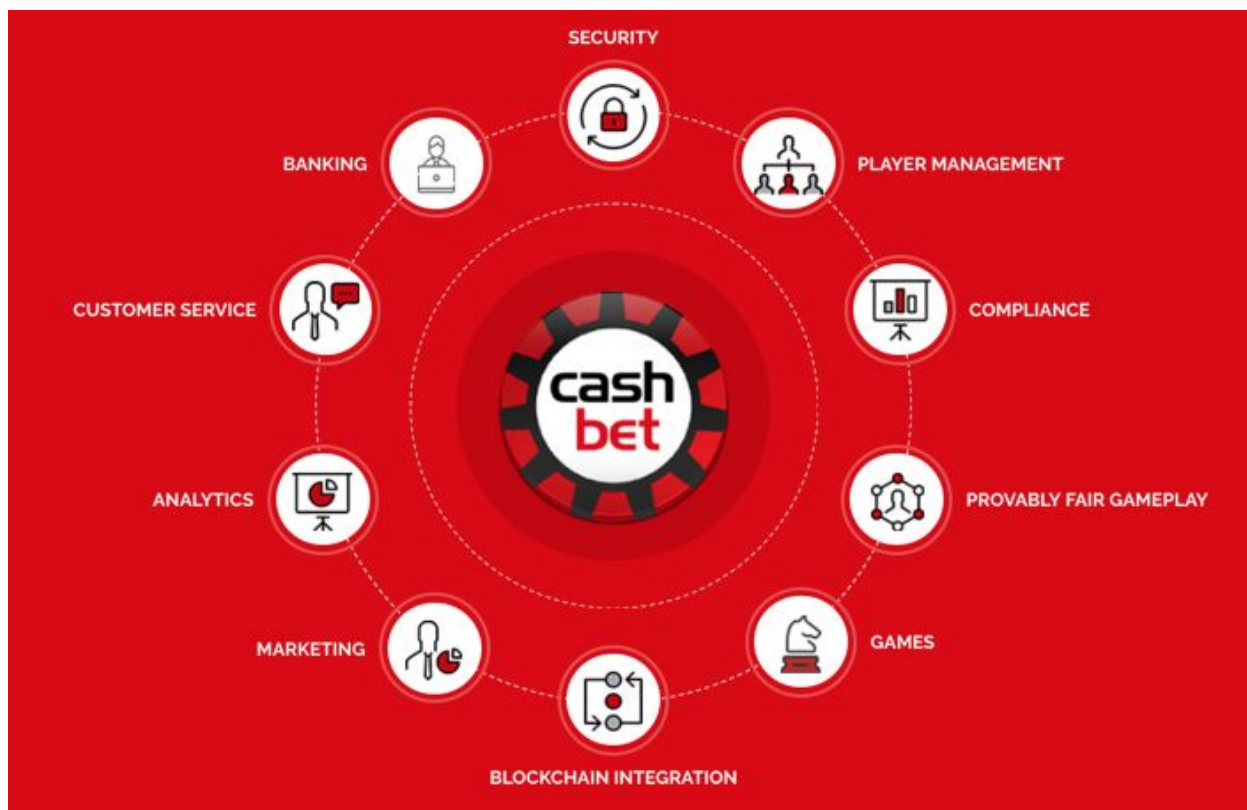
CashBet will be the first to market with a fully licensed, reputable, and comprehensive crypto-gaming solution.

The CashBet mobile-first iGaming platform has been licensed for real-money, social, and skill-based gaming and operational in several jurisdictions for over 4 years. Native and integrated third party RGS systems host a diverse selection of exclusive, unique, crypto-ready content to empower any iGaming operation. Using our vertically-integrated platform, CashBet provides player segmentation, player management, bonusing, campaign management, eWallet and geo-verification features to enhance or enable a profitable operation from day one.

## CashBet Initial Coin Offering

The CashBet platform consists of these fully integrated, third-party tested, and licensed components:

- CashBet and affiliated third-party remote game servers (RGS) and databases
- eWallet management
- Player Account Management back office
- GeoVerify services
- Native software development kits (SDKs) for optimum HTML5 presentation on iOS, Android, devices
- API servers to enhance component integration and responsiveness
- Game development kit (GDK) for content creation.



*Figure 4 - The CashBet platform provides everything an operator needs to run an iGaming business*

## Competitive Landscape

CashBet is optimally positioned in the market. CashBet supports crypto iGaming, is licensed by top tier regulators, and offers a complete platform solution. As shown in Figure 5, CashBet's competitors fall short. In fact, they could become customers of CashBet by licensing our software to fill the gaps in their offerings.

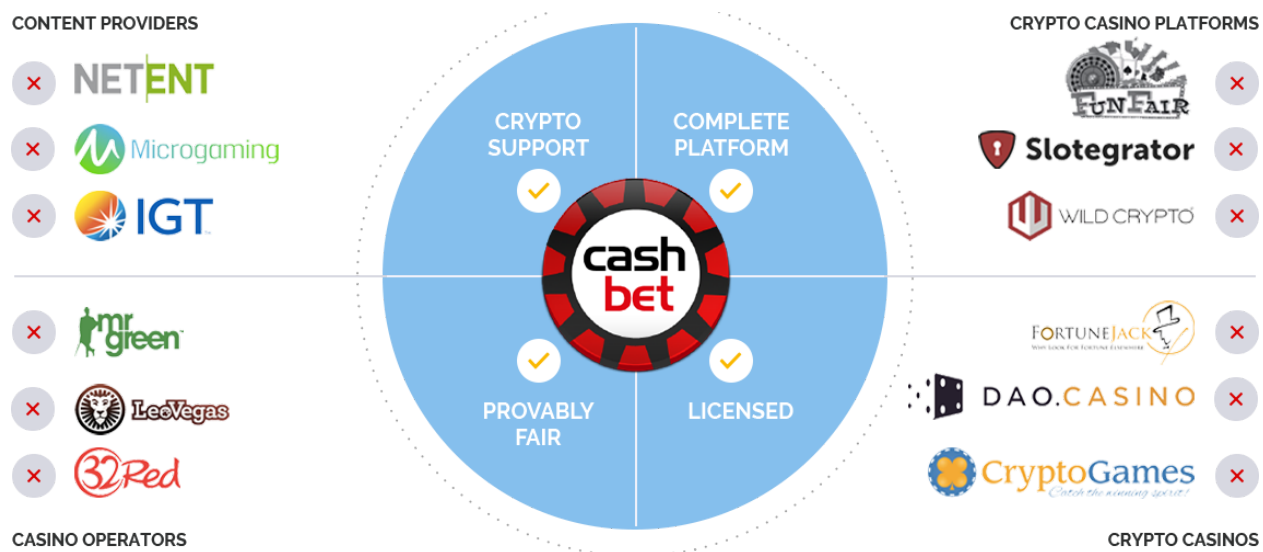


Figure 5 - CashBet is optimally positioned vs. competitors

### Content Providers

None of the top tier game content providers, including NetEnt and Microgaming, support crypto wagering. Facing a dearth of quality content, crypto casinos typically offer subpar content or build their own, which requires talent, time, and money.

CashBet will be the first game content provider to bring top tier game content - proven titles in regulated casinos - to the crypto casino market. And the CashBet platform can integrate third party content, bringing the best of social, skill, and real-money gaming titles to its B2B partners.

### Casino Operators

Most top tier casinos such as Mr. Green and 32 Red don't allow crypto wagering. In part, this reflects the technology constraints of their player wallets and back-office systems, which are designed exclusively for fiat currency transactions. Their prohibition on crypto content also reflects assumptions about the fairness of blockchain-based gaming that are demonstrably archaic.

Top-tier fiat currency operators rely on random number generators (RNGs) for outcome determination. Their RNGs are approved by regulatory bodies but only periodically - perhaps every two-three years - tested and then certified by third party consultants. By licensing CashBet Coin content - and educating and equipping players with provably fair tools to challenge outcomes, CashBet operators can credibly elevate their claims to fair play.

### **Crypto Casinos**

Most crypto casinos are not regulated at all. At best they assert that they are provably fair and therefore require no regulation. At worst they dismiss any regulations as barriers to market entry. Neither could be further from the truth.

Regulators are chartered to protect players, not casino operators. If a player has a gambling problem regulators encourage or require operators to limit or block wagers and provide access to problem gambling agencies. Operators must oblige or risk losing their licenses. Regulators also protect players with daily, monthly, and yearly audits of an operator's back office to assure player payments and wagers are aligned and on the up and up. As a top tier regulated platform, CashBet holds to - and embraces - the highest ethical and transparency standards.

### **Crypto-Casino Platforms**

Crypto-casino platforms currently available aren't complete platforms. They either lack, or must implement discrete modules for accounting and back office processing, analytics, marketing and promotions, and more. By contrast, CashBet is the only turnkey, enterprise solution that fully integrates casino capabilities and is optimized for crypto gameplay.

### **The CashBet Coin Token: Utility**

CBC-based gaming and ownership will be uniquely useful and rewarded.

CashBet is issuing CBC tokens to power both its B2C and B2B crypto casino offerings and as a publicly traded cryptocurrency. CashBet will manage its currency with safeguards that deliver concrete advantages to CashBet Coin players, partners, and owners.

In addition to using CBC for deposits and wagers on any crypto casino powered by the CashBet platform, the CBC token will reward loyalty, pay players a percentage of losses, and entitle CashBet partners to receive reduced rates on services.

### **CashBet Coin Token Utility: Partners & Players**

- White label platform partners will be encouraged, in the form rate reductions, to use CBC to pay licensing and maintenance fees to CashBet. They will receive revenue share payments in CBC.

## CashBet Initial Coin Offering

- Content distribution partners will likewise be incentivized (in the form of lower rates) to use CBC to pay licensing fees to CashBet. Casinos incorporating games from CryptoRGS will be required to offer deposit and wagering in CBC.
- CashBet Coin tokens will be granted to players as a reward for referring friends.
- Players who hold 1,000 or more eligible CBC tokens for the entire prior calendar month will automatically be granted CBC VIP status. (CBC VIP status will be suspended when the balance dips below 1,000.)

### CashBet Coin Token Utility: Owners

CashBet Coin is expected to be listed on the major crypto exchanges following the public token sale. To maintain a desirable price range for the CashBet Coin token, CashBet will establish a token management program following these guidelines:

- Beginning late in Q2 2018 CashBet will destroy CashBet Coin tokens in its possession on a quarterly basis equal to the equivalent of 25% of the company's NGR.
- The more gaming revenue generated, the more CashBet Coin tokens will be removed from circulation.

### CashBet Coin Issuance and Management

CashBet is issuing CashBet Coin and will integrate to the Ethereum blockchain in four phases.

#### Phase 1 - CBC VIP Program

- Launching in Q2 2018, the CashBet Coin VIP program will offer:
  - Access to higher value bonuses with a lower turnover requirement than non-CBC VIP bonuses.
  - VIP loss insurance – 5% of a CBC VIP player's losses will be credited back to the player at the end of the first calendar month in which he or she attains CBC VIP status. Players maintaining CBC VIP status for 3 months or more will see this amount rise to 10%. Players who maintain CBC VIP status for 6 months or more will be credited back 15% of their losses on a monthly basis.

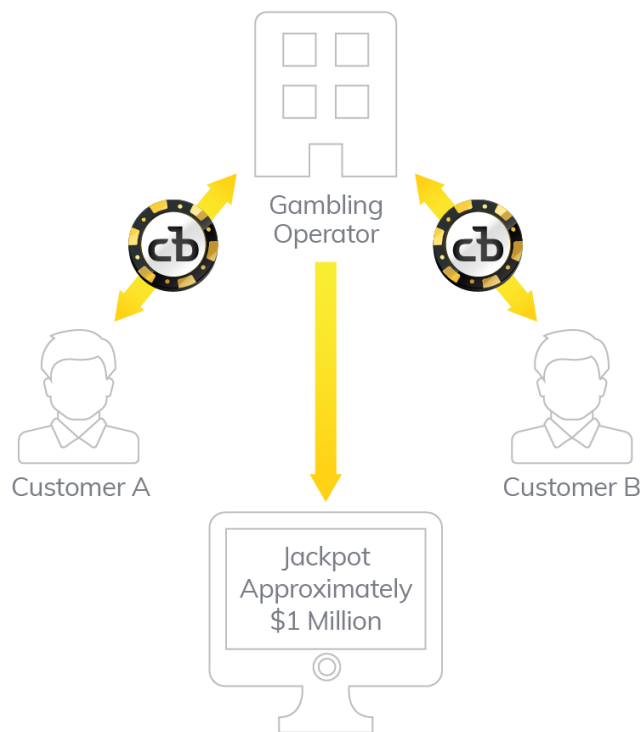
#### Phase 2 - CBC Deposit & Wagering

A summary of the Phase 2 CBC game flow is as follows:

## CashBet Initial Coin Offering

- The platform will internally convert CBC at the time of wager to fiat (USD or Euro) and convert any winnings back to CBC at the same rate.
- The player's balance will be held in CBC and clearly displayed in the CashBet eWallet interface.
- The game console will display the balance in the system currency.
- To keep the wager denominations even as the value of CashBet Coin fluctuates, the exchange rate will be updated hourly from a reference exchange.

Figure 6 illustrates the game session CBC flow, which is in accord with the Isle of Man crypto casino guidelines. This improved the gaming experience during times when CBC may be volatile.



*Figure 6 - CBC flow in game session. CBC is wagered by the player. Wagers are converted to fiat (USD). Winnings are converted from fiat back to CBC at the same exchange rate used for the wager. Players deposit and withdraw CBC, but wagering is denominated only in fiat.*

## Phase 2 CashBet Coin-in, Conversion, CashBet Coin-out

Players make deposits in CBC to the CashBet gaming platform (on blockchain), where a ledger (off blockchain) will store their balance of crypto. Wagers are made in fiat currency denominations, for example 1c, 25c, \$1. At time of wager, a recent value from a third party exchange is used to convert the CBC to fiat and that amount is debited from the player's account in CBC. On a win, an appropriate amount of fiat for the bet will be transferred to



the player's holding account, and then converted using the SAME conversion factor back into CBC. This amount will be transferred to the player ledger and which will await the next transaction.

At cash out, an appropriate amount will be transferred on ledger to the Ethereum blockchain to settle the player's account.

### **Phase 2 Conversion How and Why**

CashBet currently boasts some 450+ games integrated into its platform. The games are not denominated in cryptocurrency. The games require a discrete denomination of allowed bet amounts, like 0.01, 0.05, 0.25, 1.00, 5.00, etc. These will not be appropriate for cryptocurrencies because the value of cryptocurrencies currently fluctuate too much to be able to use these denominations at all times. Nor will any of the major game manufacturers allow their games to be played in a cryptocurrency. Instead, the CashBet platform will automatically convert wager and win amounts within the platform on a per-wager and per-win basis, as described above.

A Phase 2 CashBet Coin deposit and subsequent wagering involves three wallets:

- The player's personal crypto wallet which is drawn from to buy CBC from an exchange and sell it back for other currencies.
- CashBet's crypto wallet, which is used to receive CBC deposits and pay out CBC to players.
- The player's eWallet, which is a representation within the CashBet platform of the player's account balance in whatever currency he/she is currently using.

### **Phase 3 - CryptoRGS™**

The CashBet platform features a robust and uniquely designed remote game server (RGS) that allows for both the integration of games directly into the platform as well as the incorporation of games from other vendors. CashBet is building an exclusive library of the most popular casino games, including slots, roulette, blackjack and other table games, video poker, and bingo. This library, combined with our RGS, allows us to offer CryptoRGS, the first content aggregation platform built with crypto casino operation in mind.

CryptoRGS games will feature provably-fair operation and accept any cryptocurrency (or fiat) natively, without the need for currency conversion. Operators offering CashBet games can complete a server-to-server integration with CryptoRGS. All games will be certified by a rigorous third-party compliance testing house. Our provably fair feature may be invoked directly from any CryptoRGS game.

## Phase 4 - Pay-As-You-Go State Channel Technology - CryptoGo™

Traditionally, Bitcoin micropayments are executed via transferring transactions to third-party custodians, where users are compelled to trust custodians to stock coins, allow deposits and withdrawals, and update balances. Such an operation generates counterparty risk, adverse outcomes of which are well studied in financial economics<sup>6</sup>.

Utilizing a simpler network of micropayment channels resolves the counterparty risk problem. Such channels allow multiple payments, which allows a party to send large sums to another in a decentralized manner. Micropayment channels establish a relationship between two parties to seamlessly update balances. A transfer is activated by broadcasting the net total to the blockchain when agreed upon by both parties. Note that this allows multiple transactions to be signed by the two parties while holding off the broadcast resulting in reduced network costs.

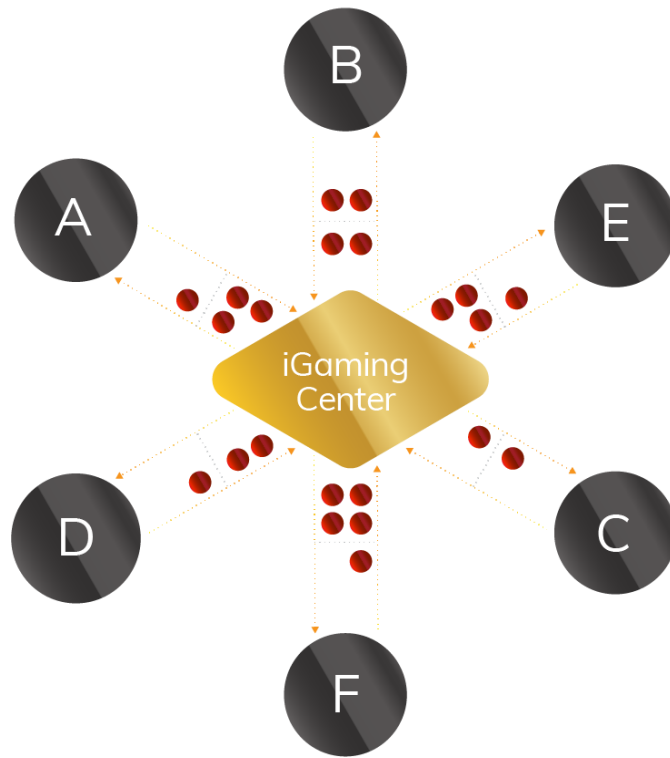
Cashbet's proprietary technology, CryptoGo, is based on the underlying technology of the blockchain and on a network of local two-party agreements. Contingent on each party signing off on spending amounts, both parties create an off-chain ledger entry, called balance proofs, denoting the transfer refunding the entry along with each party's individual allocation. Each party can update the ledger adding multiple transfers (from the ledger output), where only the latest version is contractual as imposed by the blockchain smart-contract scripts. These transfers are digitally signed and hash-timelocked operations, allowing secure conveyance of tokens among participants via bidirectional micropayment channels without the need for global consensus.

Payment channels permit practically unlimited number of bidirectional transfers between two parties provided that the net sum of transfers does not exceed the deposited tokens. Transfers can be executed instantaneously without a broadcast to the blockchain except during a one-time on-chain channel creation and final closing of the channel. Digital signatures and hash-timelocks ensure neither party can back out of any transfers contained in a channel, provided at least one party decides to present it to the blockchain. A balance proof in this design is as binding as an on-chain transaction because only the two participants has access to the tokens deposited in the payment channel's smart contract.

Our platform's strength lies in its network protocol. A sample network is illustrated in Figure 7. Each node in the network represents a party and paths between parties represent micropayment channels. The red dots correspond to tokens, i.e. payments, to be transferred between parties. Opening and closing payment channels between two parties, a payer and a payee, requires on-chain operations; therefore, establishing channels among all participants is not feasible. Instead, a payer can join the network by establishing a channel with any other party connected to the payee, enabling a transfer through intermediary parties. Unlike on-chain transactions, payment channel transfers do not require any fees. However, intermediaries in the network have an incentive to charge fees for the provision of their own channels, resulting in a competitive fee market and a need for optimal routing policies. Our solution platform facilitates this market by employing an efficient network flow optimization algorithm to minimize total costs<sup>7</sup>.

## Inner Workings of Micropayment Channels

In this system, parties create off-chain ledger entries, called balance proofs, which can be considered as certified checks issued back and forth between the two participants. The balance proof shows the final sum of all transfers to each party up to a certain point in time, digitally signed by the sender. It therefore acts as the bill for the channel.



*Figure 7 – A network of off-chain micropayment channels*

Multiple off-chain transfers can be executed back and forth between the participants, successively rebalancing the channel during the process. Eventually, one of the parties claim or pay their outstanding balance by submitting their final balance proof to the smart contract, i.e. closing the channel. The party who did not initiate closing the channel should then either submit their own balance proof or take no action in absence of transfers. Both parties can then withdraw deposits if any. Balances are distributed according to the closing party's proof, in case the second party fails to submit its own balance proof within a specified period of time. Consequently, each party has the right to access its own funds upon request.

It is important to note that although it may occur infrequently, a party can have relatively large winning amounts. Our network design includes off-chain hot and warm wallets to

cover arbitrary sums. The hot wallet is designed to cover immediate bets, whereas the warm wallet replenishes the hot wallet instantaneously in presence of a large win.

To be able to cover large wins, one needs to determine the optimal safety stocks to keep in the warm wallet and when to replenish the warm wallet. Warm wallet is replenished from a cold storage and transfers from the cold to the warm wallet are not instantaneous and require some time.

### **Creating the Channel**

The player-CashBet operator payment network uses the CryptoGo implementation of off-chain channel technology.

A participant must create a micropayment channel with another participant in order to participate in this payment network. This is accomplished through ledger entries (ledger transactions). A ledger transaction can be created by either participant. Suppose the participants are R and S, representing recipient and sender respectively. The output for a ledger transaction is a single 2-of-2 multisig address e.g. "RS". Figure 8 illustrates the processes that take place for secure payments, initiated by the recipient R.

### ***Transaction Signatures***

Any spend on the ledger entry, called Commitment Transaction in Figure 8, consists of a one half-signed transaction. The one on the left in the figure is the commitment transaction where the recipient sends its signature, whereas the one on the right is the one for the sender. Either party can broadcast the commitment transaction by signing their version upon receiving the other party's signature. The channel is open for further transactions once a transaction is committed to the blockchain.

### ***Hashed Timelock Contract***

With a network of payment channels, a blockchain enforced contract must be constructed to prevent sender, recipient, and intermediaries from delaying or stealing funds. Our system constructs a blockchain enforced contract within the network of micropayment channels in order to prevent sender and recipient from delaying or stealing funds. To this end, a hashed timelock contract is opened once a commitment agreement is in place. For secure transfer, the recipient first generates some random data D, which is used as an argument to a hash function, to produce  $H = \text{hash}(D)$ .

## CashBet Initial Coin Offering

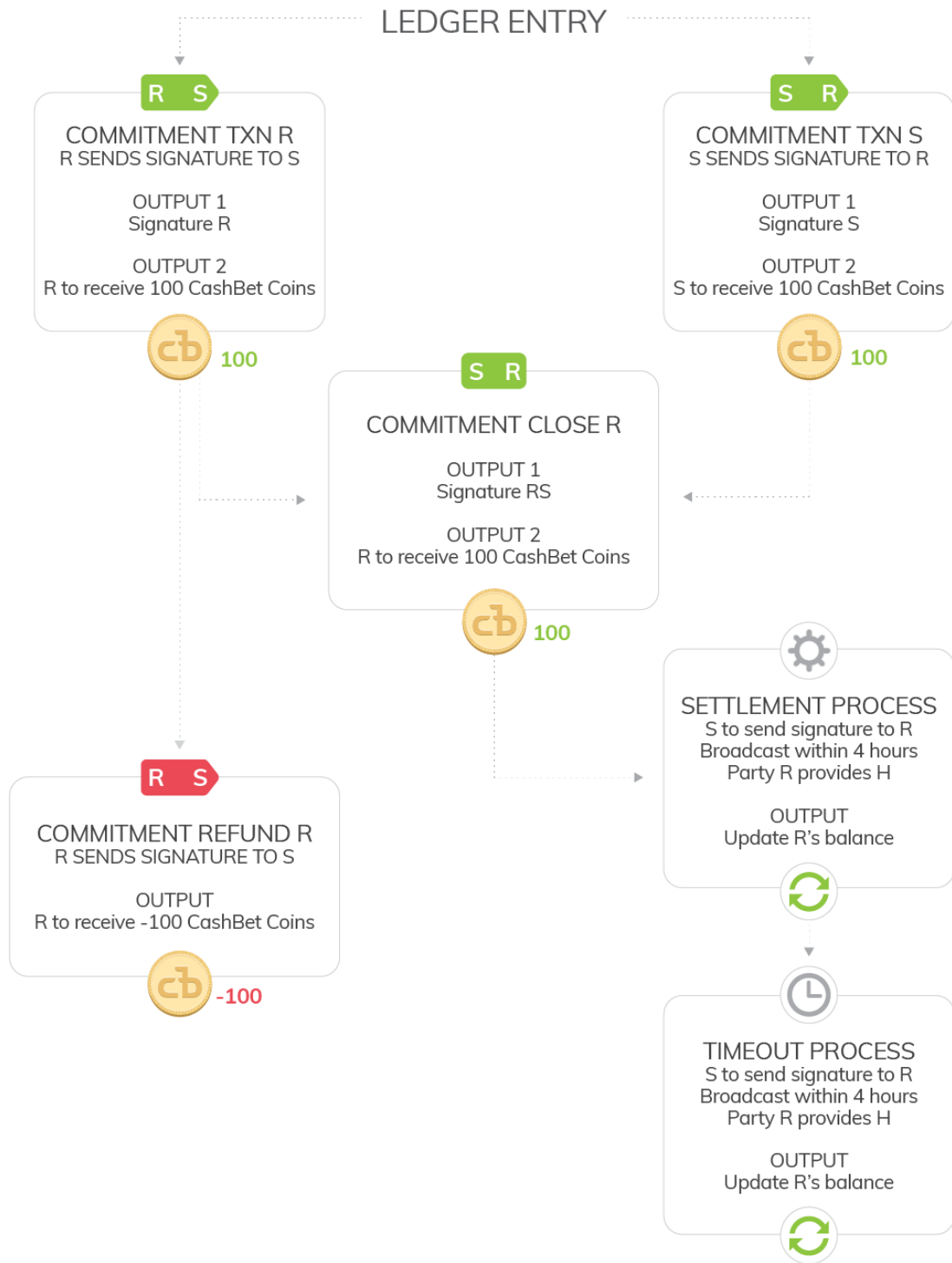


Figure 8 – Microchannel payment processing

The recipient then provides H and his bitcoin address to the party sending the funds. The recipient can choose to redeem the transaction by disclosing the data D once the sender

routes the payment and hence the recipient receives the transaction in the micropayment channel. Disclosing the data D corresponding to H enables the recipient to pull funds from the sender. The ultimate purpose of this mechanism is to require some random data D to be known and disclosed within a specified time period in order to broadcast the transaction on the blockchain. As an example, suppose this time period is 4 hours, party R is the recipient of 100 CBC, party S is the sender. This mechanism then would result in the following clearing and settlement contract:

1. Party S should pay out according to the terms in the contract and close out the contract.
2. Party S settles the contract by paying Party R 100 CBC, only if Party R can provide to Party S an unknown 30-byte random input data D from a known hash function *hash()*. (Settlement process in Figure 8).
3. The clearing process is invalidated if the clause in (2) above is null. If this is the case, neither party can claim the payment after 4 hours (4 hrs and 30-byte random data are used as examples here). (Timeout process in Figure 8).
4. A penalty comprised of the funds locked up in this contract is incurred in case of any violation of the above terms, which is to be paid to the participant not violating the terms.

### PAYOUT TIMELINE

#### CashBet Coin Solves the Payment Delay



Figure 9 - CryptoGo technology solves the payout delay problem facing today's casinos.

### Methodology for Warm Wallet Depletion

CashBet manages its cryptocurrency reserves with the following wallets:

- A hot wallet that contains the appropriate amount of reserves to cover necessary bets. This is single signature that is controlled by the system.
- A warm wallet that is accessible by the system to cover unexpected losses

- A daily “sweep” (depletion from the warm wallet) into cold storage backed by a hardware wallet with multi-sig

The solution of finding optimal warm wallet safety stock levels lies in the fact that the average casino win per specific time periods (e.g. day) can be observed historically. We present our derivation in this section by noting that finding the threshold until which to deplete the warm wallet is similar to the problem of determining economic order quantity under stochastic demand and lead time. Here, demand corresponds to losses to players, and lead time is the time it takes to bring the warm wallet funds to a high level with no risk of a stock-out, via winning a series of bets. A stock-out occurs when there are not enough funds in the warm wallet to cover the hot wallet, which is where payouts to the players occurs.

A depletion point (DP) is defined to be the warm wallet funds level until which we deplete the warm wallet. The depletion point for stochastic demand and stochastic lead time is the expected demand during lead time and an extra safety stock. Here, safety stock is held in excess of expected demand due to variable demand rate and/or variable lead time. Therefore, safety stock (SS) serves to reduce the probability of experiencing a stockout due to unexpected losses and/or variable lead times. Formally, we have:

$$DP = \text{Expected demand during lead time} + \text{Safety stock}$$

Another concept we have is the service level (SL). SL is the probability that demand will not exceed supply during lead time (i.e., the probability of no stockout).

Hence, the probability of a stockout is  $1 - SL$ .

In our case the amount of safety stock depends on

1. The desired service level  $(1 - \alpha)$
2. Daily demand random variable,  $D_i$ . The unit of  $D_i$  can be losses per day. We can observe these historically from the data and find its expectation and standard deviation  $(\mu_D, \sigma_D)$ .
3. Lead time random variable  $L$ .  $L$  can have minutes, hours, or days as units, as desired. We can observe historically its expectation and standard deviation  $(\mu_L, \sigma_L)$  from the data.

Demand is a random variable, so is the lead time demand, i.e., demand during lead time,  $D_L$ . We have

$$D_L = \sum_{i=1}^L D_i$$

Given that periodic demands (e.g., daily, hourly, etc.) are independent and identically distributed random variables and that they are independent of the lead time, we can compute the expectation  $E[D_L]$  and standard deviation  $V[D_L]$  of  $D_L$ :

$$E[D_L] = E\left[\sum_{i=1}^L D_i\right] = \mu_L \mu_D$$

## CashBet Initial Coin Offering

$$V[D_L] = V[\sum_{i=1}^L D_i] = \mu_L \sigma_D^2 + \sigma_L^2 \mu_D^2$$

By the central limit theorem,  $D_L$  follows a Normal Distribution with mean  $E[D_L]$  and variance  $V[D_L]$ . We choose the depletion point DP such that the probability of no stockout is at least  $1-\alpha$ , that is,

$$\text{Prob} ( D_L < \text{DP} ) > 1-\alpha.$$

Standard algebra using the fact that  $D_L$  follows a Normal Distribution gives:

$$\text{DP} = E[D_L] + z_\alpha \sqrt{V[D_L]} = \mu_L \mu_D + z_\alpha \sqrt{\mu_L \sigma_D^2 + \sigma_L^2 \mu_D^2}.$$

Hence, the depletion point for a desired no-stockout probability can be found using the above equation and the underlying data.

## About CashBet

CashBet was founded in 2012 by a team of industry veterans with a vision of using their extensive gaming software experience to build a next generation mobile-first monetization platform for social and mobile gaming. Previously the team successfully built and sold 2 other gaming platforms to CyberArts and US Digital Gaming (USDG).

Fast-forward 5 years later and CashBet has built a well-established, robust, mobile-first iGaming platform which has been licensed for real-money gaming and operational in several jurisdictions for over 4 years. The platform supports real-money gaming, skill-based gaming, and social gaming. The company has two patents for its technology platform (U.S. Patent No. 9,830,770 and 9,830,772 ). Several additional patents are expected to be filed in relation to current technology efforts. There are 8 operators within multiple segments of gaming using the platform worldwide. CashBet is a profitable company and is now looking to continue scaling operations worldwide with our revolutionary gaming platform.

## Company Highlights

- Launched in December of 2012
- Incorporated in the Channel Islands (Alderney, within the Bailiwick of Guernsey)
- Licensed by top tier gambling regulators: AGCC and UKGC since 2013
- 8 enterprise software customers
- Over \$10M of wagers through the platform
- Over 25K active players
- Profitable



## CashBet Team

Dr. Reaves and Dr. Weinberg founded CashBet in 2012. After meeting for the first time in 1993 at Lawrence Livermore National Laboratory, they have worked together for over 20 years, founding 3 companies together. They've built and deployed online gaming systems for lotteries, casino operators, and tribal gaming organizations throughout Europe and the United States. The CashBet team are iGaming veterans who have successfully developed and sold 2 prior online gaming platforms. CashBet's head of software architecture and other key members of the engineering team are active in the blockchain community, having developed and published Bitcoin wallets .

Today CashBet has a very strong and diverse team of 16 employees with offices in Oakland, California and Sofia, Bulgaria.

### *Management Team*



**Mike Reaves**  
**CEO and Co-founder**

Mike has over 20 years of software development and IT experience, focused on gaming, search, and advertising. He led the product development team at US Digital Gaming, and Products and Services at CyberArts, where he expanded the online eGaming company's product line from poker to casino games, bingo, and back-of-house systems. Mike holds a Ph.D. in Physics from the University of Connecticut.

<https://www.linkedin.com/in/mikereaves/>



**George Weinberg**  
**CTO and Co-founder**

George brings 20 years of software development experience in multiple areas of game systems, including high level architecture design, creation of front ends, implementation of game mechanics and accounting, integration with third-party systems, the development of computer players, automated testing systems, and compliance. George holds a Ph.D. in Physics from Texas A & M University.

<https://www.linkedin.com/in/george-weinberg-07b4b541/>



**Fred Hsu**  
**Chairman**

As CTO and co-founder of Oversee, Fred grew the domain and marketing services company to \$230M annual revenue in 8 years. In 2011, he founded and bootstrapped mobile DSP Manage.com from \$0 to \$80M in under 4 years.

<https://www.linkedin.com/in/fredhsu/>



**Daniel Edwards**  
**VP of Finance**

Daniel has over 10 years of experience in corporate development, operations and finance. Prior to joining CashBet, Daniel worked as an Investment Banker at Financial Technology Partners, D.A. Davidson, Well Fargo and Wachovia. He advised technology companies on mergers & acquisitions, capital raising and strategic corporate development. He has successfully closed over 15 M&A and capital raise transactions. Daniel also is a board member and mentor to several technology companies spanning from London to Silicon Valley. He graduated with a B.S. in Finance & Chemistry from Oregon State University.

<https://www.linkedin.com/in/dan-edwards-99050123/>



**Patrick Ross**  
**VP of Product Quality**

Patrick has 17 years of experience working in software development and IT, including 12 years focused exclusively in the online gambling industry. His technical experience has given him insight into the design of front end game presentation and back end game server architecture. Prior to becoming a founding team member at CashBet, Patrick worked on platform development at CyberArts and Ultimate Gaming.

<https://www.linkedin.com/in/patrick-ross-pmp-670b9525/>

## CashBet Initial Coin Offering



**Tim Cogswell**

**Director of Product Management**

Tim has over 17 years of experience in product development with over a decade of interactive gaming expertise. He has driven interactive product strategy for IGT, one of the largest game suppliers in the industry as well as launched one of the first tribal social casino products in California with San Manuel Digital. Tim was vital in integrating IGT's game portfolio into DoubleDown Interactive's game library.

<https://www.linkedin.com/in/tim-cogswell-1335351/>

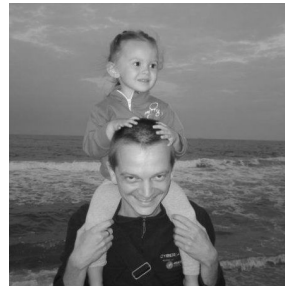
### *Other Select Team Members*



**Jay Berg**

**Senior Software Engineer**

<https://www.linkedin.com/in/jaybny/>



**Miroslav Georgiev**

**Senior Software Engineer**

<https://www.linkedin.com/in/miroslavgeorgiev/>



**Brian Hill**

**Systems Manager**

<https://www.linkedin.com/in/brianchill/>



**Vivian Kim**

**Marketing Lead**

<https://www.linkedin.com/in/viviantrankim/>

## CashBet Initial Coin Offering



**Kiril Kyutov**  
**iOS Developer**

<https://www.linkedin.com/in/kirilkyutov/>



**Ian Lesnevskiy**  
**Senior Software Engineer**

<https://www.linkedin.com/in/ian-lesnevski-941604a/>



**Luc Martin**  
**HTML5/JavaScript Developer**

<https://www.linkedin.com/in/lucmartinsanfrancisco/>



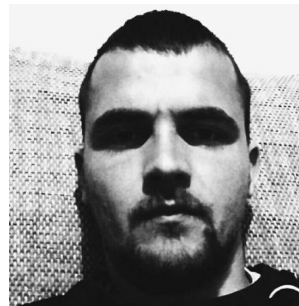
**David Montgomery**  
**Senior Software Engineer**

<https://www.linkedin.com/in/davidmontgomery/>



**Kate Pietrelli**  
**PR Lead**

<https://www.linkedin.com/in/katepietrelli/>



**Adriyan Stanchev**  
**Android Developer**

<https://www.linkedin.com/in/adriyan-stanchev-631a03107/>

## Advisory Board



### **Stuart Lewis-Smith**

Stuart is the Senior Vice President and General Manager of GSN Games/Sony. Previously, he served as CEO at Idle Games (acquired by GSN Games), a social casino mobile games developer. He has spent over 10 years managing mobile social and iGaming companies.

<https://www.linkedin.com/in/stuartlewissmith/>



### **Gavin Yeung**

Gavin is the CEO and Founder of Cryptomover, a transparent digital asset index fund. He is an experienced portfolio manager, whose first venture was installing wireless cards for college students. Gavin is a founding member of Bitcoin Association of HK, and previously worked at Deutsche Bank as a trader.

<https://www.linkedin.com/in/gavin-yeung-3a32141/>



### **Joyo Wijaya**

Joyo is an active angel investor and advisor, and is a member of Astia Angels and Stanford Angels and Entrepreneurs, as well as Principal of Tandem Entrepreneurs. Previously, Joyo was VP of Analytics and Monetization at Bash Gaming (acquired by GSN).

<https://www.linkedin.com/in/joyowijaya/>



### **Lars Wahlström**

Lars has extensive experience from the online gaming industry, both B2B and B2C. He currently works at Jackpotjoy Sweden and was Head of Nordic Markets at Gamesys.

<https://www.linkedin.com/in/larsbw/>

## CashBet Initial Coin Offering



### **Kevin Flood**

Kevin is the CEO of Gameinlane and FitCentrix. He has worked for and with US land based casino operators helping them evaluate social casino and iGaming platforms for the purpose of joint ventures and acquisitions in addition to launching online gambling operations in Europe.

<https://www.linkedin.com/in/keflood/>



### **Matt Cullen**

Matt is the founder and Chief Executive of the US Sports Integrity Alliance (US-SIA), which is uniting gaming industry stakeholders to push for the legalization of sports betting in the United States. Prior to that, he was the CEO of San Manuel Digital (SMD), the interactive business unit(s) of the San Manuel Band of Mission Indians, which owns and operates one the largest land based casino businesses in the world.

<https://www.linkedin.com/in/matthewrcullen/>



### **Tjaden Hess**

Tjaden is an Ethereum DAPP developer. At 1protocol, he designed and built the smart contract systems for decentralized staking protocols and staking pools. At ConsenSys, he developed large smart contract systems, inter-chain relays, smart contracts, libraries, and tools for blockchain app development.

<https://www.linkedin.com/in/tjaden/>



### **Shay Chinn**

Shay has been CTO, Chief Architect and/or Technology Founder at companies including eToys, dotTV, Oversee, Looksmart and is currently CTO at Agent.ai an AI-enhanced customer service software company.

<https://www.crunchbase.com/person/shay-chinn>



**Analisa Burden**

Analisa is Creative Director and Partner at Hot Streak Studio. She has over 20 years of experience in game content development and design, having worked at Konami, WagerWorks, IGT, and Bash Gaming. Analisa has deep expertise in creating compelling real-money, social, and skill-based games.

<https://www.linkedin.com/in/analisa-burden-b57195b/>



**Simon Wajcenberg**

Simon founded and built Stocknet.co.uk (online stock brokerage), Freequotes.co.uk (share price information provider), TMN Plc, (online direct marketing), and StrikeAd (mobile demand side platform). In 2013, he launched K1T Capital a systematic quant based hedge fund asset management company. In 2017, Simon launched POWtoken.com the world's first crypto currency for the mass market, which is enjoying exponential growth.

<https://www.linkedin.com/in/simonwajcenberg>



## Customers and Partners

CashBet has a diverse, international footprint with eight operators using our platform worldwide. We are also the only platform on the market that is currently supporting real-money gaming, social gaming, and skill-based gaming clients.



Figure 10 - Selected CashBet partners



## CashBet Roadmap

The project will be scoped and delivered as follows:

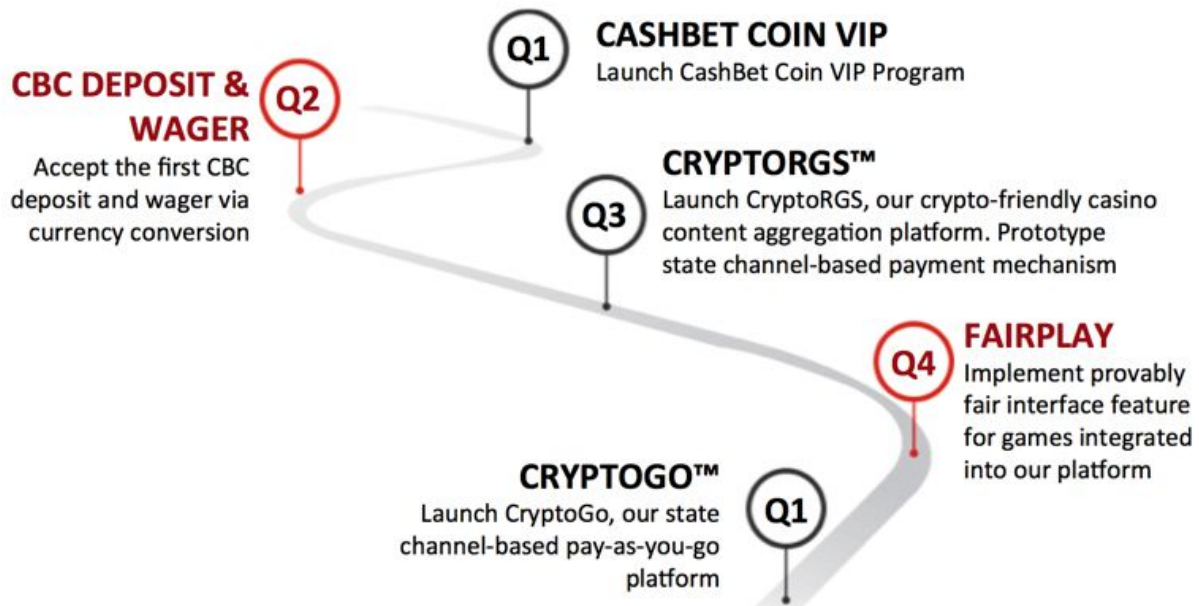


Figure 11 - CashBet Roadmap

## Token Sale

### Total Token Supply

- 430,000,000 ERC20 CashBet Coin Tokens
- No additional tokens will be created beyond this amount

### Token Distribution

For every one token which is sold, three tokens will be distributed according to the following plan:

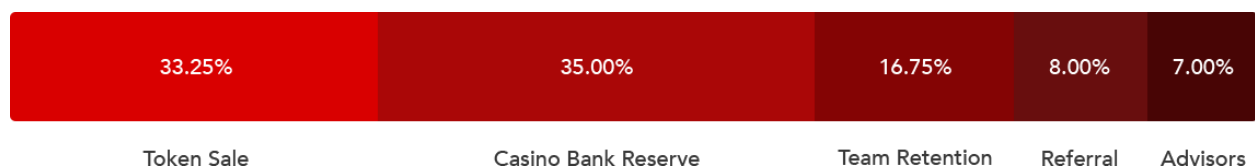


Figure 12 - Token Distribution Plan

## Token Sale Structure

The token sale event allows you to contribute to CashBet to receive CBC ERC20 Tokens.

CashBet's token sale will consist of a pre-sale and public sale as defined below. A soft cap of \$5 million equivalent value will be enforced. The ICO will end early if the hard cap is reached prior to the end of the public sale.

### *Pre-Sale*

<b>Start Date</b>	Wednesday, January 24 2018, 5:00 p.m. GMT
<b>End Date</b>	Tuesday, February 20 2018, 5:00 p.m. GMT
<b>Minimum Purchase</b>	\$25,000 USD equivalent
<b>Discount</b>	20% discount on the initial token price of \$0.50 USD
<b>Participation</b>	Open to all participants meeting the Participation Eligibility Rules
<b>Contract Type</b>	Future tokens will be offered through the sale and issuance of Simple Agreements for Future Equity (SAFTs) to certain (i) accredited Investors, as such term is defined in Rule 501 of Regulation D under the Securities Act of 1933, as amended, and (ii) other parties who are not deemed to be U.S. persons within the meaning of Rule 902 of Regulation S of the Securities Act of 1933, as amended.

### *Public Sale*

<b>Start Date</b>	Monday, March 20 2018, 5:00 p.m. GMT
<b>End Date</b>	Friday, April 27 2018, 5:00 p.m. GMT
<b>Discount</b>	<ul style="list-style-type: none"><li>• 10% discount during first 24 hours</li><li>• 5% discount during second 24 hours</li><li>• No further discounts will be offered after this</li></ul>
<b>Participation</b>	Open to all participants meeting the Participation Eligibility Rules

## Participation Eligibility Rules

- We will accept token purchases worldwide except where forbidden by law.
- Token purchases by US citizens may only be made by accredited investors.

## CashBet Initial Coin Offering

- A “Know-Your-Customer” (KYC) process will be performed during the purchase process to ensure we meet the criteria of our regulators.

### Token Price Rate & Increase Schedule

CashBet Coin will be initially priced at \$0.50 USD per token. During the Pre-Sale, the price will stay fixed at this initial rate. During the Public Sale, the price per token will increase by \$0.05 USD per week to a maximum price of \$0.75 USD as described in the schedule below.

Price Rate	Week of Public Sale
\$0.50 USD = 1 CBC	Week 1
\$0.55 USD = 1 CBC	Week 2
\$0.60 USD = 1 CBC	Week 3
\$0.65 USD = 1 CBC	Week 4
\$0.70 USD = 1 CBC	Week 5
\$0.75 USD = 1 CBC	Week 6

Note: We are aware of the potential for volatility in the Crypto market and we are offering a 50% hedge if you fund in ETH or BTC and the funding Crypto currency increases. What this means is we look at the price of your Crypto Funding on the day of submission, and again on the day of the ICO. If the price of your funding Crypto Currency is equal or lower on the day of the ICO, then nothing happens. If the price of Crypto is higher, you will receive 50% of the difference in bonus CashBet Coins shortly after the ICO.

Scenario	Impact to You
ETH or BTC Price is less than or equal on ICO Date	You get the price you initially funded at
ETC or BTC Price is greater on ICO Date	You receive 50% of the difference in Bonus Tokens

### Currencies Accepted

- Bitcoin
- Bitcoin Cash
- Ethereum
- Ethereum Classic
- Litecoin
- US Dollars (USD)

## Token Issuance

- Within two weeks of the conclusion of the token sale, CashBet Coin will be distributed proportionately to purchasers on a pro-rata basis.
- CashBet Coin tokens will be physically transferred to purchasers' ERC20-compatible Ethereum wallets, which will have been specified in the purchasers' profiles at coin.cashbet.com.
- Tokens distributed to team members through CashBet's retention program will be released gradually, over a 24-month period, in order to avoid flooding the market with tokens.
- Any unsold tokens will be destroyed.

## Use of ICO Proceeds

The use of proceeds from the coin sale will depend on the total value of tokens sold, as detailed in the scenarios below.

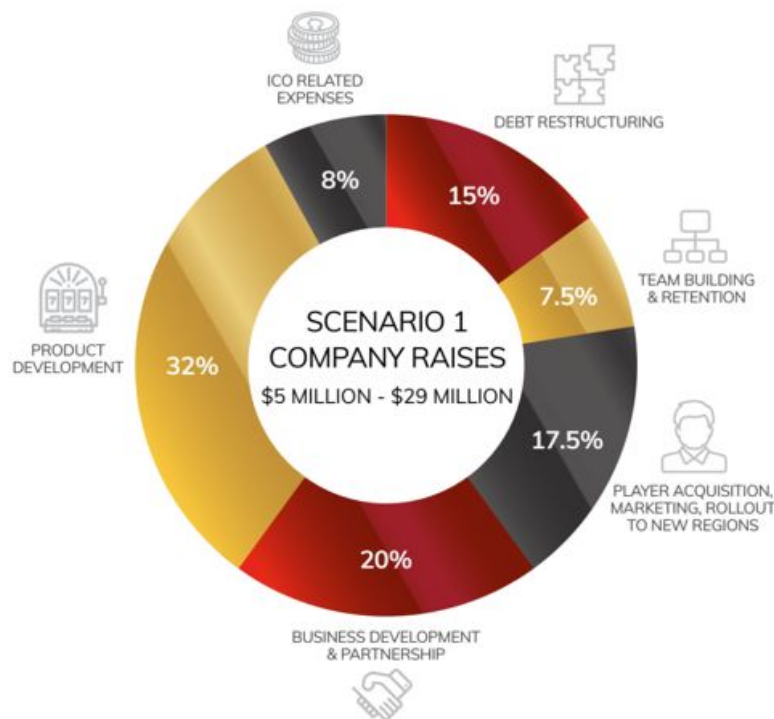


Figure 13 - Use of ICO proceeds if company raises \$5 million to \$29 million

## CashBet Initial Coin Offering

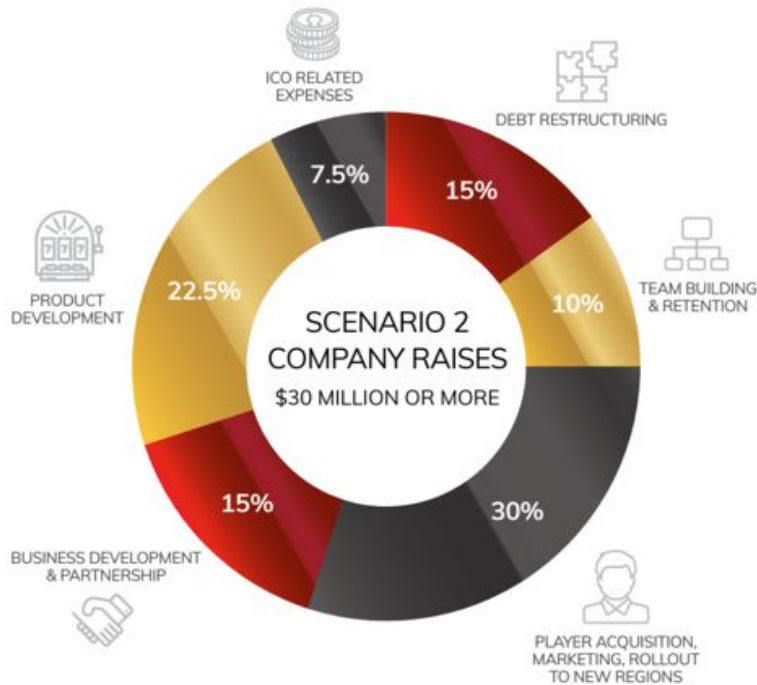


Figure 14 - Use of ICO proceeds if company raises \$30 million or more

### Financial Plan

We believe that the use of proceeds in either scenario will allow CashBet to reach our vision of building out the world's first crypto-ready comprehensive iGaming platform. Proceeds above our goal will act as a catalyst for our global growth. They will allow us to hire additional resources for furthering technology development and expanding into more markets at a quicker pace. CashBet became a profitable company in 2017 and plans continued operations into the foreseeable future as a profitable company. The ICO proceeds will enable CashBet to execute on its vision of offering the world's first crypto-ready comprehensive iGaming platform and result in tremendous financial growth and strong revenue for years to come.

### Disclaimer

Caution: CashBet will never ask for your private key or ask for transfer to a private address. All contribution wallet addresses will only be on the official ICO page, [coin.cashbet.com](https://coin.cashbet.com). Should anyone request for you to transfer any currency to them via Private messages or any other channels other than the official ones listed below, it could be a phishing attempt to scam you of your coins. If you discover anyone or any website masquerading as us, please email us at [ico@cashbet.com](mailto:ico@cashbet.com).

## Official Sites and Pages

Official CashBet Site: <http://www.cashbet.com>

Official CashBet ICO Site: <http://coin.cashbet.com>

Official CashBet Facebook: <https://www.facebook.com/cashbetcoin/>

Official CashBet Twitter: [https://twitter.com/CashBet\\_mgt](https://twitter.com/CashBet_mgt)

Official CashBet Telegram: <https://t.me/cashbetcoin>

## Document Revision History

- 1.1 15-Sep-2017 Initial version
- 1.2 25-Sep-2017 Technical Review
- 1.3 06-Oct-2017 Added
- 1.4 17-Oct-2017 Updated tech sections micropayment channel description.
- 1.5 01-Nov-2017 Revised pay-as-you-go description and token utility.
- 1.6 09-Nov-2017 Updated token loyalty program and token distribution details.
- 1.7 18-Nov-2017 Additional details on Bitcoin VIP program.
- 1.8 16-Dec-2017 Rollout phases
- 2.0 22-Dec-2017 CryptoRGS and About Cashbet
- 2.1 23-Dec-2017 Revisions to formatting, fixed typos, final team review
- 2.2 1-Jan-2018 Final English version
- 2.3 7-Jan-2018 Formatting of CashBet team section, update to select graphics
- 2.4 8-Jan-2018 Update to Token Sale section, update to total token supply
- 2.5 10-Jan-2018 Update to Token Sale section, token pricing now in ETH not USD; added advisor
- 2.6 16-Jan-2018 Update to Token Sale section, token pricing now reverted to USD; added additional terms to address BTC and ETH pricing volatility
- 2.7 20-Jan-2018 Update to listed time and timezone of token sale
- 2.8 20-Jan-2018 Added Advisor Matt Cullen

- 2.9 22-Jan-2018 Update to Token Sale section: pre-sale terms, participation eligibility, currencies accepted

## Bibliography

1. <http://www.jeffcoleman.ca/state-channels/>
2. <https://bitconnect.co/bitcoin-news/588/ethereum-scaling-sees-progress-while-fees-continue-to-rise>
3. Provably fair is a regime of third-party certification of cryptocurrency iGaming platforms and outcomes.
4. <https://www.coindesk.com/maltas-government-may-test-cryptocurrency-in-regulatory-sandbox/>
5. <https://medium.com/blockchannel/the-ico-rat-pack-gambling-tokens-b79e04ac76cb>
6. Thompson, James R. Counterparty Risk in Financial Contracts: Should the Insured Worry About the Insurer? The Quarterly Journal of Economics, Volume 125, Issue 3, 1 August 2010.
7. Ahuja, R.K., Magnanti, T. L., Orlin, J. B. Network Flows, Theory, Algorithms and Applications, Prentice Hall, NJ.