Features of Blockchain and Its Influence on Gambling

Blockchain has been around since 2008, and since then it has been used for many different things. It was introduced as the platform where Bitcoin peer-to-peer transactions are performed. However, with the release of smart contracts, it has taken on many more complex roles. People have been putting their trust in the blockchain concept because of a few key features.

- **Decentralization.** This has enabled the users of blockchain to take control of their own affairs, as this is a platform not managed and owned by one company. The power of this digital ledger belongs to the people using blockchain.
- **Privacy.** Transactions are private and you do not need to produce any personal information, as the authorization of the transaction is provided by a code and a link to the account.
- **Accessibility.** Anybody can become a miner of cryptocurrency, including making extra cash utilizing the job creation opportunities.

Benefits of Using Blockchain Technology in Gaming Business

Casinos have also taken the opportunity to engage in making use of blockchain for various transactions. Firstly, making payments for games and gambling online. This has resulted in quick and easy deposits/withdrawals and faster turnaround times. No need to rely on corporate companies and their servers, which are less stable.

It increases the customer base, as anybody with cryptocurrency is accepted. By incorporating crypto record system in gaming the ownership established in funs and betting rooms is uncompromised. Have a look at some of the comments of professionals in the industry.

First of all, we'd like to share the opinion of *Jan Sammut* who is the part of the BlockScope group of companies. He's the partner of RefToken, a decentralised affiliate marketing platform on the Ethereum blockchain. He considers that Blockchain tech will usher in a cleaner, more transparent era in the gambling industry, particularly in the **B2B sector**. Whilst players are not overly concerned that an operator will withhold payouts, or that the games will cheat them, the B2B side of the industry, particularly the affiliate side is ripe for disruption by adding **transparency and auditability**. So the following statement proves his idea that it will be the B2B relationships which will be impacted first:

> The affiliate/operator relationship is quite a tense one, with both sides of the deal having a financial incentive to cheat the other side. This can happen by operators skimming or shaving sales figures (which they report to affiliates), to affiliates running CPA fraud or operators withholding commission payments. This is a perfect use case for blockchain and smart contract technology as it allows it to disintermediate a conflicting relationship into a self-enforcing and self-governing protocol.

The question asked to *Ivan Montik*, Softswiss was as follows: ***"What impact will blockchain have on the gambling industry? Is it for good or for bad?***

> Blockchain will and already does have a global impact on the gambling industry. It is a true game changer. All gambling regulators will transfer to blockchain in their gaming business licensing procedures, from fraud tracking and provably fair control to responsible gambling and finance management. It is definitely for good as it means 100% transparency of financial operations, clear taxation, a healthy business environment and sustainable development of the industry as a whole.

The same question was asked to *Nick Garner*, the founder of Oshi.io online casino that earned the reputation of the reliable and very fair betting website. He's absolutely sure that soon blockchain technology will drastically change the gambling industry. He gave a quite open answer:

> Obviously blockchain will disintermediate and decentralize to a large extent. So we're already seeing ICO's from people like Funfair and Bettor and significantly within the skins gambling ecosystem OPskins and their WAX tokens.
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> With this decentralization comes the ability to create pop-up operations with minimal start-up costs and equally minimal legislative oversight. You then mix in the pseudo-anonymity of Cryptocurrency i.e. money on the blockchain and the easy anonymity on the Internet and you've got a very sensitive situation potentially building up.
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> Longer term i.e. within five years, blockchain enabled gambling will be massive and will probably rival traditional iGaming as we know it today. It's not going to be traditional casinos with lots of slots games, it's going to be skins loot boxes, skins gambling games and E-sports and so on. In other words, skins gambling i.e. loot boxes, which are controlled by the game publishers will end up migrating onto the blockchain and into open marketplaces/ecosystems and you will then have a massive explosion in online gambling.

He also thinks that people doing the gambling won't see themselves as gamblers, much like lottery ticket purchasers don't see themselves as gamblers either. And this is the recipe for blockchain gambling going huge, simply because it's going to be socially acceptable.

The same idea regarding ICO is shared by *Johan Styren*, CEO at Dilanti Media and the experienced expert in E-commerce and the mobile gambling industry. He believes that online businesses are naturally more likely to take advantage of the opportunities of blockchain and ICOs:

> " The biggest impact will come from ICOs and through that a new source of funds for investment in the industry. I believe this is an opportunity for some new small operators potentially leading to some new positive innovation in the industry.

Also the very interesting point of view was expressed by *Andre Rodrigues*, the experienced leader with previous experience in companies that operate in the digital and land-basedgaming space. He's CEO – Goldblue AB – Igaming Investment Company in Emerging Markets. Together with obvious benefits in igaming payments process, he thinks that:

> " Users also benefit from more confidentiality around their transactions. However, that is one small application of the blockchain and it's technology, I believe in the future operators will be using it far more and in more advanced way's such as for wallet ledgers, player activity, etc. relaying less on the traditional databases hosting infrastructures and increasing security and transparency to players.

Warranty of Funds Safety

There is one quick answer and it is, yes. Blockchain has certainly increased the safety and provided more privacy to all players. The main aspect of safety is your money does not belong to the casino or game owner; it is recorded on the blockchain. No identification issues and the privacy of the user is protected. Blockchain will be responsible for making the bet according to the smart contract instructions. This builds trust and enhances the relationship between the two parties. Here is what *Hugo Luz dos Santos* says about smart contracts:

> " These digital platforms can foster the decentralization of digital-money transactions but, at the very same pace, can boost the pitfalls of a digital currency system conveniently wrapped in opaqueness that maximizes protection of the privacy of the stakeholders involved in the digital currency transactions but hinders or minimizes the efforts of the regulators and law enforcement agencies to curb money laundering worldwide.

Also about warranty of players funds and anonymity, *Joseph Borg*, the **Partner of Gaming Advisory and Blockchain Advisory**, expert in in gaming & gambling, technology at the whPartners, have his own opinion:

> " Blockchain and smart contracts can truly revolutionise gaming as the operator will not need to hold player funds anymore. The amount being wagered by the player in that moment, will be deposited into the smart contract. This brings peace of mind to players, operators and regulators alike. Anonymity is not an option in regulated gaming, mainly because minors cannot be protected if the operator does not know who is playing on its platform.

In general he conseders that blockchain technology brings much more good than bad. Some of the pros of blockchain are immutability of transaction data, greater transparency with provably fair games, easier, faster and cheaper remittances, as well as operational efficiency for operators. *Everyone can benefit from blockchain in gaming, operators, players as well as regulators.*

Legality of Gambling on Blockchain

Most of the regulations of online casinos in countries across the globe do not specifically include the new technology of cryptocurrency and blockchain gambling. This is still a grey area, therefore it can be said that anyone that has a cryptocoin account such as Bitcoin or Ethereum can use this account to gamble safely online.

Even in countries, which are largely restricted to virtual gaming, this method of play could be acceptable after regulation. Our experts do agree on this matter. Here is what *Anastasiya Rimskaya*, Business Development Manager at Endorphina had to say when was asked if decentralized gambling should be compliant with regulations:

> " Nowadays, there are almost no legal regulations for blockchain since it's a relatively new addition. I believe that soon the official legal department will have to emerge with new regulations worldwide to regulate the operations of this new kind of gambling. With blockchain, the entire gambling industry will become completely transparent for everyone, including regulators.

Here *Frank Schuil* expresses his thoughts regarding the future of gambling on blockchain technology. Frank Schuil – CEO, Co-founder and Board Member **Safello**, founder **Rhino Ventures**:

> " The gambling industry has always been hard to audit from a user perspective.

> The algorithms that are working behind the scenes to turn a profit are open to the regulators only. With blockchain technology this is different, you can have any kind of scheme that is totally transparent. Already we are seeing interesting experiments with this in prediction markets (Augur), Ponzi schemes (FOMO3D) and betting (HORSE). Likely we will see the gambling market as the frontrunner for global adoption of cryptocurrencies.

Besides, here is the opinion of the Senior Partner of Dickinson Wright PLLC, Michael D. Lipton, Q.C., the leading lawyer and consultant of the several branches like Gaming&Hospitality, Administrative&Regulatory, etc.

> Blockchain can assist the disclosure process for multi-jurisdictional companies with hundreds of licenses. Creating blockchain disclosure information accessible to regulators will save time & money for licensees & regulators. Updating personal information will be quicker & inexpensive than filing paper disclosure containing the information.

David Mann, the Sales & Business Development Manager, from Wazdan has shared his thoughts regarding legislation of the blockchain-based gambling projects. Of course he considers that Blockchain technology have a great impact on the gambling industry if applied correctly. Players like to feel confident and assured that their **game play is safe, secure and above all fair**. And:

> Blockchain's nature enables the transparency to give more assurance to players, building trust with operators and keeping regulators happy. It is important however proper legislation is brought in to ensure that the technology works in a fluid and respectable manner.

Joakim Renman, the commercial director at Scout Gaming Group, has some predictions regarding authority impact on crypto gambling. He is profoundly experienced in **B2C Poker, B2B casino and betting**. Scout Gaming Group is a licensed and regulated developer, operator and provider of different types of wagering.

> I think people greatly underestimate the influence of authorities if they think of blockchain as a way to remove or limit authority involvement. Much as the internet started as a freedom project, so will blockchain end up in the hands of governments.
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> Once moved into a heavily regulated market, I don't think blockchain will serve so much as a currency as it will be a way for authorities to monitor and verify gambling transactions. Governments may very well end up creating a national gambling "chip" in the form of a token that allows them full and real-time control of all gamblers activity, current balances etc.

Anonymity (No Documents Verification)

It's not only about gambling. When you deal with cryptocurrency or any distributed ledger platform, in particular, all you need to have is an address to transfer money to. More to the point, it is created in the flick of the switch — "Generate a public address." Note: *The 'public' only stands for the fact that anyone knowing your address can remit funds to it.* That is to say:

- It is not associated with your personal information, because…
- It is not linked to any bank account, thus…
- You are the only one to control your funds.

Regardless, of the IP you choose to enter a particular casino, there is no tracking system for recording transactions. Meaning that you are not obliged to verify your financial stability. That's where the element of anonymity intercepts with the fact that blockchain transactions, commonly, are free from taxation, because do not fit in the legal field of most countries, so far.

Of course, regulation is on the way. The thing is that, however, by the time regulation arrives, the market will already be occupied and successfully working. As of now, anonymity allows players to start receiving tax-free profit by only making three basic steps:

1. Register on a certain gaming platform;
2. Generate the address for receiving funds;
3. Play.

However, there's an opposite opinion regarding anonymity from *Kate C. Lowenhar-Fisher*, the leading attorney from Dickinson Wright PLLC who specializes in issues with iGaming, betting, etc.

> I think one of the most challenging issues is the anonymity or quasi-anonymity associated with the use of blockchain/crypto-currency. Gaming companies who operate in the regulated (legal) gambling space must adhere to strict KYC, Bank Secrecy Act and geolocation requirements. The licensed gaming operators must know from whom they are taking bets, where their patrons are located, and that legitimate sources of funds were used for the wagering transactions. Currently, cryptocurrencies make meeting those obligations difficult, if not impossible.

The same point of view is shared by another specialist *Lau Kok Keng*, the Head of Intellectual Property, Sports & Gaming at Rajan & Tann Singapore LLP. He agrees that with the distributed ledger offered by blockchains, transparency is ensured since gamblers would be able to track all transactions with the operator and the blockchain impacted upon the payment processes in that it avoids the need for involvement of third-party intermediaries. However, there are some downsides he mentions:

> Cryptocurrencies are highly volatile and susceptible to major shifts in its value, and this would pose a business risk to operators. Blockchain e-wallets containing the user's cryptocurrencies are only identifiable by a unique PIN-number, and this makes it harder for gambling operators to comply with their AML obligations, specifically when conducting KYC checks.

Blockchain Increases Responsible Gambling

When looking at blockchain betting rooms they confirm that all dealings are provably fair. This means that they have an open source algorithm powered by the crypto technology, which ensures that all random seed generation and random number generation, including hashing, are free from fraud.

This does improve the current RNG system, which can be tampered with and confirms that blockchain operators are more "fair" or "provably fair" in their games and way of dealing with bets and players' money. The transparency of this data and availability to players makes casino clients trust the system more as they can ensure that everything is working according to the algorithms provided by blockchain. Softswiss confirms this when saying:

> Blockchain definitely guarantees more fair gambling. By eliminating all possible fraud issues, it will allow casinos to concentrate on providing an incomparably better service to players making casinos games completely provably fair and bringing them to a whole new level: responsible gambling based on pure and transparent entertainment.

Also, *Stephen Drew* had commented the question with blockchain casinos fairness. But first here is a short bio of the trader. Stephen has 25 years of experience in investment banking, fintech, software & real estate. Last 4 years investing and trading cryptocurrencies. Worked on Wall Street for 20+ years (**Citibank, Deutsche Bank, Bankers Trust, Alex Brown 1st IB** in the USA) in trading and investment banking.

Stephen has raised over $1 billion in financing for his clients, ranging from small to medium size companies. With CGC Stephen oversees the day to day operation of the fund from analyzing investments to speaking with high net worth individuals and family offices. Advisor to over 20 blockchain companies. Member Yale Club NYC.

> Blockchain transactions automatically create a record that cannot be changed. Transactions cannot be copied or deleted. This allows users the ability to verify that transactions have actually taken place. Cryptography thus makes it possible for sites to show that they are, indeed, honest. Blockchain provides provable fairness, meaning that all gambling entries and payouts are verifiable, viewable, and fair.

Summing up all the above-mentioned, we quote *Roger Ver*, a well-known businessman in crypto business, the investor of such big projects as Bitcoin and startups as Ripple, Kraken, Blockchain.info and also the supporter of Bitcoin hard forks:

> Provably fair online crypto currency based games are leading to a new paradigm in which players no longer need to trust the house, or even a regulatory body at all.

Gaming Industries Built on Blockchain Technology

The versatility of blockchain technology lets developers build all kinds of games that run on a decentralized ledger – from lotteries and sports betting to online poker and slots. In fact, even land-based casinos opt to use digital record system for their slot machines.

Mark Hamade, the Partner of Vivaris Capital, LLC, believes that in terms of the whole gambling industry and every form, blockchain is an emerging technology that cannot be taken lightly. Legislation will be an issue. Security will be an issue. As we have seen anyone can be hacked. He says:

> The Gambling industry will surpass $500 billion in 2019. Blockchain technology has the potential to transform the gambling industry. The ability to create dependable systems and allow for trustworthy transactions in a manner that is decentralized in lotteries, land & online, poker, sports betting is certainly a vision that we can together work to accomplish if we focus on the nuts and bolds and really building solid and meaningful applications from the bottom up.

Land-Based Casinos

Recently it has been confirmed that new blockchain machines will be released. They will be embedded with the same functionality as the old ones, but with some differences. It is considered that the financial volume on crypto casinos will increase to a huge $59 billion by the year 2020, making these changes cater for the high volumes and exceptional quality that are to be expected.

The new blockchain machines are already being produced and they will be situated in the major land-based venues worldwide. This will bring a lot more newcomers to these gaming houses and get them all enthusiastic about the new technology. They are also investigating lower transaction costs and developing machines, which will support more payment methods including cash and credit cards.

Although this might seem exciting, some experts have voiced that they will treat such developments with caution, where others like Softswiss are ready for the next level.

> Using blockchain as a tracking system and creating a blockchain casino is one of our future plans. How soon it can actually be brought into life depends on the regulators' policy and on how quickly they actually start using blockchain for tracking and control. From our side, we try to speed up the process by providing consulting services to the key players in gambling regulation and helping them understand the idea of blockchain and integrate the technology into their working processes.

Online Casinos

The principal advantage of online staking houses built on the digital ledger is that whatever games you play, they run in your browser and do not involve any servers or, all the more so, entity's bank account storing users' money. This makes the gamblers independent. Here's what Jez San, the founder of FunFair, said about the freedom granted to bettors, who deal with blockchain-based casinos:

> At the moment in the online gaming industry, players don't always trust the online casinos. People have to make deposits with credit cards into the casino's own account, so the players lose control of their funds. In our games, the players keep control of their funds at all time. They don't make a deposit, they just play the games directly from their own cash wallet.

Aside from provably fair games that provide ultimate self-dependence for users, blockchain operators still have certain advantages towards the conventional ones. For example, the first Ethereum-based casino exploited the scene with an ambitious statement of having a 0% house edge (while usually, it's 1%-5%).

Meaning that there is no guaranteed percent that house wins. The strategy is not stillborn. The success is achieved through accurate calculations that prove that amusements, which require SKILL and LUCK (not only luck, like in the case of roulette), will bring staking website the edge of approximately 0.83% in the long run.

Along with advantages of online casinos running on blockchain, *Joseph F Borg* (Gaming Advisory and Blockchain Advisory at WH Partners) defines the main issue related with protection of vulnerable persons (including minors) and ensuring that such activities are not being used as tools by criminals. Here's the summary of his reasoning:

> Blockchain is good for gaming. However, having websites that do not register players, do not ensure that they are of age, do not offer player protection mechanisms, and potentially run by persons that are not diligent, competent and respectable, is a big problem. The only solution is regulation to cater for these problems while embracing and taking advantages of the opportunities presented by this technology.

Tone Vays (Blockchain/Bitcoin Analyst, Content Creator & Derivatives Trader) have the similar point of view. He thinks that Blockchain already had its biggest impact on gambling and that is processing of payments via Bitcoin.

> With Bitcoin, Gambling companies can quickly take user's bets, even without those users having accounts and trust that the payment is not going to be charged back. They can also pay out users globally without any need for bank account or centralized services. As for using Blockchain as a database to somehow store your data, create transparency or decentralize prediction market, I just don't see it.

In Finland, for example, it's not so easy to implement blockchain technology upon gaming business as *Ilkka Aalto-Setälä* considers (Partner, Head of Competition and Public Procurement at BORENIUS ATTORNEYS LTD). Veikkaus Oy is the only gambling operator in Finland that has the right to run gambling. Indeed, the Finnish Government pursues to channel the demand for gambling into national supervised gambling games.

By this token the Government has initiated a working group that will make a preliminary report on the technical measures that can be used to prevent online gambling run by any other operator than Veikkaus in mainland Finland. The report will also assess the legislative changes required to implement these technical measures. The payment blocking is obviously one option on the table. However, Ilkka Aalto-Setälä says:

> Payment blocking would be hard or even impossible to implement if the gambling provider uses virtual currency and/or payments systems that are based on e.g. blockchain technology. It remains to be seen how the Government will tackle the issue. It is also possible that the technological development will

> question and disrupt the legal monopoly at the end of the day.

Crypto Poker

Today there are increasingly more poker rooms built on top of blockchain technology. Needless to say about the improved usability and faster speed – it goes by default. In fact, there are at least two essential features, which are of much greater value. If you look at the list of popular poker websites, you will see that they not only plan to build a peer-to-peer interaction in the gameplay, but also introduce their own cryptocurrency. So again, what they furnish is two basic tools:

1. **User-to-user interaction**. There are only users and the platform, by means of which they communicate. Considering the fact that trust is delivered through cryptographic algorithms, no one controls the process, except the game itself. Fairness is achieved at the stage of developing a smart contract.
2. **Token issuance.** Players are going to need tokens because it's an in-game cryptocurrency. While, investors can also make a good use of it, because in case the poker gets popular, the demand for its native cryptocoins will upsurge together with its price.

Also, cryptocurrency contributions to gaming can be considered from other aspects: cryptocurrencies as another currency or asset, cryptocurrency as a payment solution, cryptocurrency for fund raising,and, blockchain technology itself. Here Nicc Lewis, the founder of Expozive, has some thoughts. Expozive is a Marcom / Marketing Agency & Consultancy focusing on Online Gaming and Affiliate Marketing. Nicc has over a decade and a half experience in Marketing in the digital field in both B2B and B2C. Industry experience includes Cryptocurrencies, Forex, CFD and Adult Entertainment.

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> As a currency we may see the asset added to spread betting in the future, but I believe this is relevant more for financial brokers than gaming. Crypto as a payment solution looks to be one way we will see looked into for gaming companies. Any industry that is online and taking payments, especially “high risk” industries will be looking to see how they can offer crypto as a solution for money in and money out.
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> The nature of the chain means that payments are also much faster than traditional methods such as bank wires. In terms of fund raising, we may see gaming companies develop their own currency offering and launch an ICO. On the, one hand it will raise revenues that can in turn be use to expand operations and marketing and the other a safe and fast payment solution. Companies such as Uber are already looking into this, gaming companies will surely have to as well.
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> In terms of the technology itself, the global secured network of a blockchain has many applications above and beyond cryptocurrencies. One Government is investigating if blockchain technology can be used to store and release medical histories, for example. We may see some gaming companies use the technology for other purposes such as a gaming server or information relays for real time events.

Sports Betting

Blockchain is a transparent digital ledger, where any information can be transferred instantly. That's why it can be successfully applied in sports betting, resulting in a more accurate predictive market. The distributed network can potentially solve a number of problems in sports betting. Here is the functionality the crypto technology-driven platforms are expected to offer to their users:

- Gather the required information from all over the web in one place;
- Conduct instant cashouts in cryptocurrency;
- Execute bets immediately;
- Provide the opportunity for users to build their own smart contracts that are programmed to automatically execute the bets when needed.

And here is the answer of *Alex Czajkowski*, CMO at RTG Asia. He speaks about the useful and useless influence of blockchain on the gaming industry and sports betting particularly:

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> While blockchain is very cool technology, its impact on gambling will be very limited. For secure, distributed use of player data, like medical records, it WILL be useful; can't be hacked. Very useful for securing player data and the agreements between a player and an operator, e.g. terms and conditions of bonuses. For tracking the results of every spin, every blackjack hand, the results of the match, it'll be near useless…. it's not needed and only slows and over-complicates the process.
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> Interestingly, the way “the results of the match” are decided is a precursor to the distributed data solution blockchain provides – all the (vast majority of) official sites say the score was X-X at end of the match and Y-Y at last whistle. In sports betting, that's what makes the final call – for the last 50 years or so (e.g. as far back as I can remember 😉)

Blockchain Lottery

Speaking about lotteries, the benefit of applying blockchain is actually quite obvious. Until now, you could have never known whether the lottery results are fair or not, because the lottery is all about luck and nothing else. Today, there are plenty of crypto-based platforms like FireLotto, Kibo or Trueflip that will enable players to participate in a transparent, fair and indisputable, in terms of safety, game.

The original code is open-source, so anyone can check 'the rules' that determine the winner. On top of it, the distributed network enables a lottery platform that has no country borders, but, at the same time, conducts instant payouts because they are done in cryptocurrency.