
LAW, TECHNOLOGY AND CRYPTOCURRENCY

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ABSTRACT

The law and technology are intertwined in complex ways. The rapid advancement of technology has caused the law to struggle to keep up with the changes. With the emergence of cryptocurrency, the corporate world has had to deal with the consequences of this new digital asset. This paper seeks to explore the effects of cryptocurrency on corporate law and the implications of this new technology. The first part of this paper will examine the legal implications of cryptocurrency on corporate law. This includes the potential for the use of cryptocurrencies in international transactions, the application of securities law, and the impact of cryptocurrency on taxation. It will also consider the effects of the decentralization of cryptocurrency on corporate governance and the need for increased regulation. The second part of this paper will discuss how technology has enabled the development of blockchain technology, which has been used to create secure and transparent networks. It will analyse how this new technology has been adopted by the corporate world and how it has been used to facilitate the use of cryptocurrencies. It will also consider the potential for blockchain technology to create new opportunities for companies to streamline their processes and to create new business models. Finally, this paper will explore how cryptocurrency has impacted the corporate world and how companies are responding to the changing legal and technological landscape.

Keywords: Cryptocurrency, Blockchain technology, Legal implications

INTRODUCTION

Technology and law have become inexorably linked in today's world. The ever-increasing use of technology has had a profound effect on the legal system, as the law is constantly adapting to keep up with new trends and developments. This has been especially true in the corporate and commercial world, as technology has drastically altered the way businesses operate and interact with each other. The most significant developments in recent years have been the emergence of blockchain technology and cryptocurrency. These new technologies have been adopted by many businesses, and have had a major impact on the corporate and commercial world. The intersection between law and technology has become increasingly important in the modern world. As technology advances, it inevitably creates new legal challenges that must be addressed. Lawmakers, attorneys, and judges must adapt to these changes to ensure that the law keeps pace with technological progress. In this article, we will explore some of the key issues that arise at the intersection of law and technology, including intellectual property, privacy, cybersecurity, and artificial intelligence. Moreover, we will explore the implications of law and technology in the corporate and commercial world, with a particular focus on blockchain and cryptocurrency.

- **Intellectual Property:**

Intellectual property is a broad term that refers to the legal rights associated with creative works, such as patents, trademarks, and copyrights. In the digital age, intellectual property has become even more important as new technologies have made it easier to copy and distribute creative works. This has created new legal challenges for creators and owners of intellectual property. One issue that has arisen in the digital age is the question of who owns digital content. For example, if someone creates a piece of content on a social media platform, who owns the rights to that content? Does the creator retain ownership, or does the platform own it? This has become a contentious issue, with many creators arguing that they should retain ownership of their content. Another issue that has arisen is the question of how to protect intellectual property in the digital age. Traditional forms of protection, such as copyright, are becoming less effective as it is easier than ever to copy and distribute content. This has led to the development of new technologies, such as digital watermarking and blockchain, that can be used to protect intellectual property in the digital age.

- **Privacy:**

Privacy is another area where technology has created new legal challenges. As we spend more time online and share more information about ourselves, it becomes increasingly important to protect our privacy. However, this is becoming more difficult as technology advances. One issue that has arisen is the question of how to regulate data collection by companies. Many companies collect vast amounts of data on their users, which can be used to target them with ads and other content. However, this data collection raises concerns about privacy, as users may not be aware of what data is being collected or how it is being used. Another issue that has arisen is the question of how to regulate government surveillance. As governments around the world use technology to monitor their citizens, there are concerns about how this surveillance is being conducted and whether it is in violation of privacy rights.

- **Cybersecurity:**

As more and more of our lives are conducted online, cybersecurity has become a critical issue. Cyber-attacks can have serious consequences, from stolen data to disrupted infrastructure. This has created new legal challenges as governments and companies try to prevent and respond to cyber-attacks. One issue that has arisen is the question of how to regulate cybersecurity. Should governments impose regulations on companies to ensure that they are taking appropriate measures to protect their systems from cyber-attacks? Or should companies be allowed to develop their own cybersecurity measures? Another issue that has arisen is the question of how to respond to cyber-attacks. Should victims be allowed to take legal action against the perpetrators of cyber-attacks? And if so, what form should that legal action take?

- **Artificial Intelligence:**

Artificial intelligence (AI) is another area where law and technology intersect. As AI becomes more advanced and more widespread, it creates new legal challenges that must be addressed. One issue that has arisen is the question of liability for AI systems. If an AI system causes harm, who is responsible? Is it the developer of the system, the owner of the system, or the AI system itself? This has become a complex issue as AI systems become more autonomous and less reliant on human input. Another issue that has arisen is the question of bias in AI systems. AI systems can be biased in a number of ways, from racial and gender bias to algorithmic bias. This has raised concerns about fairness and discrimination.

The development of blockchain technology has changed the way we look at transactions and how we use the internet. Blockchain technology is a distributed ledger technology that allows for secure, transparent, and immutable transactions between two or more parties. This technology has been around since 2009, but it has only recently become popular as its potential applications and implications become more widely known. Blockchain technology is based on a peer-to-peer network, which allows for users to create and maintain a secure, decentralized, and distributed ledger of transactions. This ledger is stored on multiple computers and is kept up-to-date with the latest transactions and data. The benefit of this decentralized ledger is that it is secure, transparent, and immutable – meaning that it cannot be modified or tampered with by anyone. The technology has been used for a wide variety of applications, from cryptocurrency to smart contracts, and even for voting systems. The use of blockchain technology in these applications is gaining traction, and it is likely that we will continue to see its use in more and more areas. The development of blockchain technology has been enabled by advancements in technology such as artificial intelligence, quantum computing, and cloud computing. These technologies have made it easier to develop and maintain secure and distributed ledgers.¹

What is Blockchain and Cryptocurrency?

Before discussing the implications of law and technology in the corporate and commercial world, it is important to understand the basic concepts of blockchain and cryptocurrency. Blockchain is a distributed ledger technology (DLT) that enables secure, transparent and efficient transactions. It is a digital ledger that records transactions, and is maintained by a network of computers. Transactions are stored in blocks, and each block is linked to the previous one, forming a chain.

CRYPTOCURRENCY

Cryptocurrency is a digital asset that uses cryptography to secure financial transactions, control the creation of additional units, and verify the transfer of assets. Cryptocurrency is becoming increasingly popular in the corporate and commercial world, as it offers a secure, low-fee, and efficient payment method for both businesses and consumers. Cryptocurrency is gaining traction among companies, both large and small, due to its benefits. Transactions are secure

¹ Deepankar Roy, A. S. (2016). Payment Systems in India: Opportunities and Challenges. *Journal of Internet Banking and Commerce*, 1-49.

and transparent due to blockchain technology, and the fees are usually much lower than those associated with traditional payment methods. The use of cryptocurrency can also reduce the risks associated with international payments and provide businesses with access to a global market. Additionally, cryptocurrency can be used to reward customers and partners, to raise capital, and to pay employees. The uses of cryptocurrency is also revolutionizing the way businesses operate. Companies can now accept payments in cryptocurrency, which can be converted into fiat currency at any time. This eliminates the need for a third-party payment processor and reduces transaction. Cryptocurrency can also be used to facilitate the purchase and sale of goods and services, as well as to transfer funds between parties. This is especially beneficial for businesses that conduct international transactions, as the cost and risk associated with currency exchange is significantly reduced.

LEGAL IMPLICATIONS

Cryptocurrencies have had a significant impact on corporate law, with the emergence of blockchain technology and digital assets presenting new legal challenges and opportunities for businesses. In this article, we will explore some of the key legal implications of cryptocurrency on corporate law.

- **Corporate Governance:** One of the most significant implications of cryptocurrency on corporate law is the potential impact on corporate governance. With the rise of decentralized autonomous organizations (DAOs), which are run entirely by code and governed by token holders, traditional concepts of corporate governance are being challenged. This raises questions about who is responsible for decision-making and oversight in a decentralized organization and how conflicts of interest are managed.
- **Securities Law:** Cryptocurrencies are often issued through initial coin offerings (ICOs), which are similar to initial public offerings (IPOs) in traditional finance. However, the regulatory landscape for ICOs is still evolving, with regulators around the world grappling with how to classify these assets and whether they fall under securities law. This has implications for businesses looking to raise funds through ICOs

and may require them to comply with securities laws in different jurisdictions.²

- **Intellectual Property Law:** The use of blockchain technology in cryptocurrency presents new challenges for intellectual property law. Blockchain technology allows for the creation of digital assets that can be easily transferred and traded, which raises questions about ownership and control of these assets. This has led to the development of new legal frameworks, such as non-fungible tokens (NFTs), which are used to represent unique digital assets like art and music.
- **Tax Law:** Cryptocurrencies are subject to tax laws in many jurisdictions, with gains from cryptocurrency trading often being treated as capital gains for tax purposes. However, the decentralized nature of cryptocurrency transactions can make it difficult for businesses to comply with tax laws, as it can be challenging to track and report transactions.
- **Contract Law:** The use of smart contracts in blockchain technology presents new opportunities for businesses to automate and streamline their operations. However, this also raises questions about the enforceability of smart contracts and how disputes are resolved in a decentralized environment.

LEGAL ISSUES

There are several legal issues that arise in the intersection of technology and cryptocurrency. In this article, we will explore some of the most significant legal issues in this area.

- **Regulatory Uncertainty:** The regulatory landscape for cryptocurrencies is still evolving, with different countries taking different approaches to regulating these digital assets. This can create uncertainty for businesses and investors, who may be unsure of how to comply with various laws and regulations.
- **Money Laundering and Terrorism Financing:** Cryptocurrencies can be used for illegal activities like money laundering and terrorism financing. This has led to

² Akhtar et al (2019) "Potential of Blockchain Technology in Digital Currency: A Review," 2019 16th International Computer Conference on Wavelet Active Media Technology and Information Processing, 2019, pp. 85-91, doi: 10.1109/ICCWAMTIP47768.2019.9067546

increased scrutiny from regulators and law enforcement agencies, who are working to develop measures to prevent these activities.

- **Intellectual Property Issues:** The use of blockchain technology in cryptocurrency can create new intellectual property issues. For example, the creation of new tokens or cryptocurrencies may infringe on existing trademarks or patents. Similarly, the use of smart contracts can create issues around ownership and control of intellectual property.³
- **Taxation:** Cryptocurrency transactions may be subject to taxation in different jurisdictions. However, the decentralized nature of these transactions can make it difficult for tax authorities to track and enforce tax laws.
- **Consumer Protection:** Cryptocurrencies can be volatile and subject to sudden price fluctuations. This can create risks for consumers who invest in these assets without fully understanding the risks involved. Additionally, the lack of regulation in some jurisdictions can make it difficult for consumers to seek legal recourse if they are defrauded or otherwise harmed in a cryptocurrency transaction.
- **Cybersecurity:** Cryptocurrency exchanges and wallets are vulnerable to hacking and cyberattacks. This can result in the theft of digital assets and personal information, which can have serious financial and reputational consequences.

The intersection of technology and cryptocurrency raises a variety of legal issues that businesses and investors need to be aware of. As the regulatory landscape continues to evolve, it is important to stay informed about developments in this area and to take steps to mitigate legal risks associated with cryptocurrency transactions.

CRYPTOCURRENCY ON TAXATION

Cryptocurrency has become an increasingly popular form of investment in India, with millions of people investing in digital assets like Bitcoin, Ethereum, and others. However, the rise of cryptocurrency has also presented a challenge for the Indian government, which is grappling with how to tax these new forms of assets. In 2018, the Indian government issued a statement

³ Giudici, G., Milne, A., & Vinogradov, D. (2019, September 17). Cryptocurrencies: Market analysis and perspectives. Retrieved from <https://link.springer.com/article/10.1007/s40812-019-00138-6>

declaring that cryptocurrencies are not legal tender and warning that users who invest in them do so at their own risk. The government also indicated that it would take measures to curb the use of cryptocurrencies for illegal activities like money laundering and terrorism financing. Despite the government's warning, cryptocurrency trading has continued to flourish in India, with many investors making substantial gains in a relatively short amount of time. However, the government has been struggling to determine how to tax these gains, which are often substantial and can be difficult to track. One challenge is that cryptocurrency transactions are decentralized and not subject to the same reporting requirements as traditional financial transactions. This means that it can be difficult for the government to track cryptocurrency transactions and ensure that investors are paying the appropriate taxes. To address this issue, the Indian government has been exploring a number of measures to tax cryptocurrency transactions. One proposal is to require cryptocurrency exchanges to report all transactions to the government, which would make it easier for tax authorities to track and monitor cryptocurrency investments. Another proposal is to treat cryptocurrency gains as capital gains, which would subject them to the same tax rates as gains from other forms of investment like stocks and real estate. This would require investors to report their gains on their tax returns and pay taxes on any profits they make from cryptocurrency trading. However, implementing these measures has proven to be challenging, as the decentralized nature of cryptocurrency transactions makes it difficult to track and monitor them effectively. Moreover, there is still a lack of clarity on how to tax cryptocurrency transactions, as there is no clear guidance on how to value these assets or how to account for the risks associated with investing in them.

CASES

There have been several notable cases related to technology and cryptocurrency in India. Here, we will discuss some of the most significant cases in this area:

- **Reserve Bank of India v. Internet and Mobile Association of India:** In 2018, the Reserve Bank of India (RBI) issued a circular prohibiting banks from dealing with businesses that deal in cryptocurrencies. The Internet and Mobile Association of India (IAMAI) challenged this circular in court, arguing that it violated their fundamental rights. In March 2020, the Supreme Court of India ruled in favor of the IAMAI, holding

that the circular was unconstitutional and void.⁴

- **Coinsecure Hack:** In April 2018, the Indian cryptocurrency exchange Coinsecure was hacked, resulting in the theft of around 438 bitcoins worth approximately \$3.3 million at the time. The exchange initially claimed that the funds had been lost due to a technical glitch, but later acknowledged that they had been stolen. The incident highlighted the need for stronger cybersecurity measures in the Indian cryptocurrency industry.
- **Unocoin Arrests:** In October 2018, the co-founders of the Indian cryptocurrency exchange Unocoin were arrested for allegedly violating Indian laws related to money laundering and the use of unauthorized payment systems. The founders were later released on bail, but the case raised questions about the legality of cryptocurrency transactions in India and the regulatory framework for the industry.
- **Koinex Shutdown:** In June 2019, the Indian cryptocurrency exchange Koinex announced that it was shutting down due to regulatory uncertainty and difficulties with banking services. The exchange cited the RBI's circular as a major factor in its decision to cease operations, highlighting the challenges faced by Indian cryptocurrency businesses in the absence of clear regulatory guidelines.
- **WazirX ED Investigation:** In June 2021, the Enforcement Directorate (ED) of India launched an investigation into the Indian cryptocurrency exchange WazirX for alleged violations of the Foreign Exchange Management Act (FEMA). The ED alleged that WazirX had facilitated transactions worth over Rs 2,790 crore (\$378 million) in violation of FEMA rules. The case is ongoing, and highlights the need for strong regulatory oversight of the Indian cryptocurrency industry.⁵

The cases related to technology and cryptocurrency in India demonstrate the legal challenges faced by the industry in the absence of clear regulatory guidelines. As the Indian government continues to grapple with the issue of cryptocurrency regulation, it is important for businesses and investors to stay informed about legal developments and to take steps to mitigate legal risks associated with cryptocurrency transactions.

⁴ Reserve Bank of India v. Internet and Mobile Association of India

⁵ WazirX VS Binance

COMPANIES RESPONDING TO LEGAL CHANGES

Cryptocurrency is rapidly revolutionizing the corporate world. Companies are rapidly adapting to the new legal and technological landscape that cryptocurrency has brought. As the cryptocurrency market continues to grow, businesses must make sure they are aware of the legal and technological implications that arise with it. The first step for companies is to understand the new regulations surrounding cryptocurrency. Governments around the world are beginning to regulate the cryptocurrency market, and companies must make sure they are compliant with these regulations. Additionally, companies must be aware of the taxes they may owe on any cryptocurrency-related transactions they make. The next step companies must take is to understand the technological aspects of cryptocurrency. Companies must understand the technology behind cryptocurrencies, and any potential implications it may have for their business. For example, companies must be aware that cryptocurrencies are decentralized, meaning that there is no central authority controlling them. This means that companies must be aware of the potential for fraud and other criminal activities that can take place in the cryptocurrency market. The third step companies must take is to develop strategies for utilizing cryptocurrency. Companies must decide whether they want to accept cryptocurrency as a form of payment, and if so, how they plan to do it.

The legal and technological landscape is constantly evolving, and companies are being forced to adapt quickly to stay ahead of the curve. With new laws and regulations being introduced regularly, and new technologies emerging all the time, it can be challenging for businesses to keep up. However, many companies are rising to the challenge and taking proactive steps to respond to these changes. One of the most significant legal changes in recent years has been the introduction of the General Data Protection Regulation (GDPR) in Europe⁶. This law, which came into effect in 2018, gives individuals more control over their personal data and requires companies to be more transparent about how they collect, store, and use this data. Many companies have responded to the GDPR by updating their privacy policies and strengthening their data protection measures. This has included investing in better cybersecurity systems and conducting regular audits to ensure they are complying with the new regulations. Another area where companies are responding to legal changes is in the field of environmental regulation. Governments around the world are introducing new laws to combat climate change, and companies are being required to reduce their carbon emissions and adopt

⁶ General Data Protection Regulation (GDPR)

more sustainable practices. Many businesses are responding to this by investing in renewable energy sources and implementing more eco-friendly policies across their operations. Technological changes are also driving companies to adapt quickly. One area where this is particularly evident is in the rise of automation and artificial intelligence (AI). As more jobs become automated, companies are having to retrain their employees and find new ways to add value to their operations. Many businesses are also exploring the potential of AI to improve their products and services, from chatbots that can provide customer support to algorithms that can predict consumer behaviour.

CONCLUSION

Law, technology, and cryptocurrency have created an entirely new digital economy that is in constant flux. Cryptocurrency is a revolutionary new way to store, send, and receive money with a secure, transparent, and immutable ledger. However, it is important for the legal and technological infrastructure to keep up with the rapidly changing landscape of cryptocurrency. The intersection of law, technology, and cryptocurrency is a complex and evolving area with a range of legal and regulatory issues. Cryptocurrencies such as Bitcoin and Ethereum have disrupted traditional financial systems, and their decentralized nature has presented a challenge for legal and regulatory frameworks. Government and regulatory bodies around the world are grappling with how to regulate cryptocurrencies while balancing the need to encourage innovation and investment. Some countries have banned or restricted cryptocurrencies, while others have embraced them and developed specific regulatory frameworks. The use of blockchain technology, which underlies cryptocurrencies, has also presented legal challenges in areas such as smart contracts, intellectual property, and data privacy. The immutability of blockchain records has implications for the admissibility of evidence in legal proceedings, and the use of blockchain in supply chain management and other industries raises questions about liability and accountability. Overall, the intersection of law, technology, and cryptocurrency is a rapidly evolving area with many unanswered questions and challenges. As cryptocurrencies and blockchain technology continue to grow and mature, it is likely that legal and regulatory frameworks will continue to adapt and evolve to meet the needs of this new and dynamic landscape. Governments and financial institutions must develop and implement laws and regulations to protect consumers, investors, and businesses from fraud and abuse. Furthermore, technological advancements must be made to ensure secure and efficient transactions. As

cryptocurrency continues to grow and become more widely accepted, the effects of this new digital economy will be felt by all.