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Assessing the Marketing Strategies of Crypto Currencies and Blockchain Technology- A Study

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ABSTRACT
In the current financial market environment, the research emphasizes the importance and benefits of blocks in technology and distributed ledger technology. Furthermore, because of the amount of innovation it delivers to current organizations, it has become a significant force in the market. Many businesses and organizations throughout the world are finding it difficult to grasp the concept of blockchain and distributed ledger technology (DLT) and improve their current operations. Understanding the concept and operation of technological blocks can help to improve this specific disruption. Although both are distinct, blockchain technology is often used interchangeably with distributed ledger technology (DLT). Blockchain employs a variety of technologies, one of which is distributed legend technology, which enables blockchain applications. A blockchain is an immutable shared ledger that aids in the tracking of assets and the recording of transactions in a corporate network. A blockchain network can trade nearly anything with a value, whether it is intangible or tangible. It aids in the reduction of costs and hazards associated with existing financial authorities. Blockchain technology is relatively new in the present industry, but its numerous advantages have

the potential to disrupt current financial structures. The paper examines the disruptive dynamics of blockchain and distributed ledger technology, as well as their impact on the current financial system.

LITERATURE REVIEW

Although both are distinct, blockchain technology is often used interchangeably with distributed ledger technology (DLT). Blockchain employs a variety of technologies, one of which is distributed legend technology, which enables blockchain applications. A blockchain is an immutable shared ledger that aids in the tracking of assets and the recording of transactions in a corporate network (Li and Kassem 2021). A blockchain network can trade nearly anything with a value, whether it is intangible or tangible. It aids in the reduction of costs and hazards associated with existing financial authorities. Blockchain technology is relatively new in the present industry, but its numerous advantages have the potential to disrupt current financial structures. According to(Hunhevicz and Hall 2020), blockchain technology allows a community of users to record transactions in a public ledger particular to that community, preventing transactions from being disseminated once completed. Blockchain is being used and tested in a variety of settings, including exchanges, digital trusts, and beyond all main cryptocurrencies, and serves as a contractual backbone of trust in the modern digital age. DLT, on the other hand, is one of the most rapidly evolving digital technologies in recent years, and it will play a vital part in the digital transformation of various activities in most industries. Decentralization, immutability, distribution, organization, and encryption are all features of a real blockchain. The hype around blockchain technology has created a significant gap between its actual capabilities and what it can accomplish on the ground. Distributed ledger technology, on the other hand, is rapidly gaining traction in organizations and growing popularity across a wide range of industries. Individuals are using blockchain technology to transfer funds across borders that are not regulated by banking organizations. Many organizations have found it easier to trade funds in the form of bitcoin, which has become nearly difficult to track by any relevant regulator or financial institution.

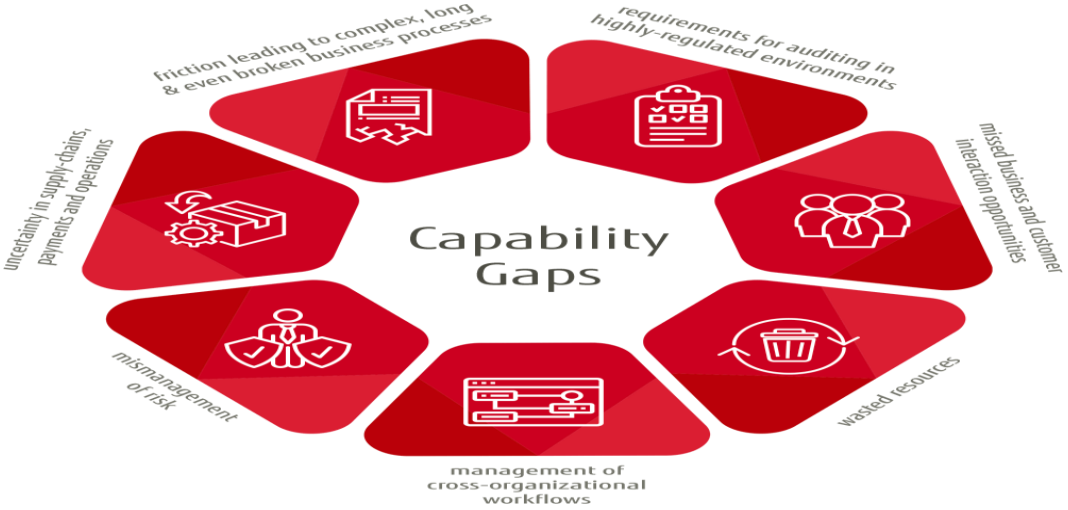

Figure: CAPABILITY GAPS
(Source: Idc.com, 2020)

Blockchain and distributed ledger technology (DLT) have been major disruptors in modern technology. In the years 2017 and 2018, hundreds of firms, including all of the main global leaders in various regions of the world, joined big DLT and blockchain initiatives. The "IBM cross-border payment blocks and effort" was unveiled in 2017 and includes all of the main firms in the Asia Pacific area (Forbes.com, 2017). This campaign now has 100 firms participating. DLT is a relatively new technology that exists outside of the realms of cryptocurrencies and Bitcoin, both of which are well-known in the industry. The internet of things has been interwoven into the blockchain, which has taken the furniture services business by storm (IoT). According to Adams, Kewell, and Parry (2018), the key innovation driving the creation of Bitcoin is a blockchain, also known as distributed ledger technology. Bitcoin has had a huge influence on society and the present financial system, even though it was first met with suspicion and wonder. Bitcoin is a disruptive force in the global payments system, with the capacity to develop itself without the backing or assistance of the old financial system. However, its initial use was successful, particularly in the black market, defying all odds, and blockchain technology spawned additional business enterprises, exchanges, cryptocurrencies, consortiums, and alliances all over the world. On August 12, 2021, the World Economic Forum published a study on the future of financial infrastructure, focusing on the revolutionary impact of blockchain technology. It has extensively examined the technology's influence on the financial services business in terms of increasing security and transparency. Researchers are looking at probable factors such as landing and depositing, insurance, investment management, and market provisioning (Pečarić et al. 2020). DLT has already begun to influence the present financial industry. According to the WEF research, 80 percent of banks worldwide will be able to launch a DLT project in the next years, and more than $1.4 billion has already been invested in the technology's development over the last three years. Furthermore, all of the world's main governments and financial organizations have been flaunting their current position in this technology and its development.

METHODS AND TOOLS

In recent years, Bitcoin has gained attention for its underlying technology, blockchain, which has demonstrated its potential to be utilized in many areas other than digital currencies and financial services. It has resulted in the production of a multi-billion dollar surge of wealth in the form of investments from various corporate houses and startups all over the world. According to Koay and Muthuveloo (2021), disruptive forces in the market are generally the result of a new technological innovation that every organization is attempting to embrace. According to the most recent analysis from "counterpoints emerging tech opportunity service," blockchain is having a disruptive influence on several businesses that are currently functioning in the market. Most firms throughout the world are finding it difficult to integrate the technology in the approaching years. In the present market, DLT and blockchain are becoming a disruptive force in the following ways: In fundamental ways, distributed ledger technology (DLT) will influence various industrial sectors. Many business people are unable to see beyond cryptocurrency to the genuine threat and opportunity that the technology might give. DLT has the potential to be used in a variety of businesses and financial services. The use

of DLT in the banking sector will considerably reduce the number of people necessary to approve and authenticate a transaction, resulting in a large increase.Globally, prominent companies such as Ripple, Chain, and Abra are collaborating with all major financial institutions to reimagine trade finance, remittances, and settlements. Beyond financial services, the potential uses of DLT are endless. However, the majority of these applications have yet to be evaluated and implemented on the ground. Blockchain is not a financial services application, and it is still in its infancy, with significant obstacles in its development including scalability, privacy, cost, and regulatory concerns(Konashevyc 2020).There are major market participants with the ability to deploy DLT on a broad scale in present enterprises, making it one of the most significant disruptors in the current environment. DLTs, like blockchain, have the potential to have a major influence on the globe. However, it is expected that adoption will be on a slow and steady basis. Due to difficulties in coordination among many parties linked with the technology, its implementation would slow its market development (Zaidi et al. 2019). All of the world's main countries have been thinking about developing new technologies that will be able to diminish the hegemony of some banking institutions that currently govern all international transactions. Because of the rising Hegemony of Western nations, the development of blockchain technology is sweeping the station countries (Knapp et al. 2020). All of these causes are to blame for the present banking industry and other businesses being disrupted. Many businesses are still evaluating the capacity and long-term profitability of blockchain and DLT, which are functioning as key disruptors in the present system.

DATA ANALYSIS AND FINDINGS

All of the biggest enterprises in the world are being spread online, and all transactions are being digitalized. Furthermore, there has been an unexpected emergence of digital services that would include integrity, security, and trust in current services based on the fundamental principles of digital transaction context.In the current corporate context, the de facto reality of the internet of things (IoT) is its enhanced transaction process in terms of speed, scalability, data, and volume. The contemporary business climate necessitates the development of a system that is safe, transparent, and free of the strict rules imposed by financial institutions throughout the world.

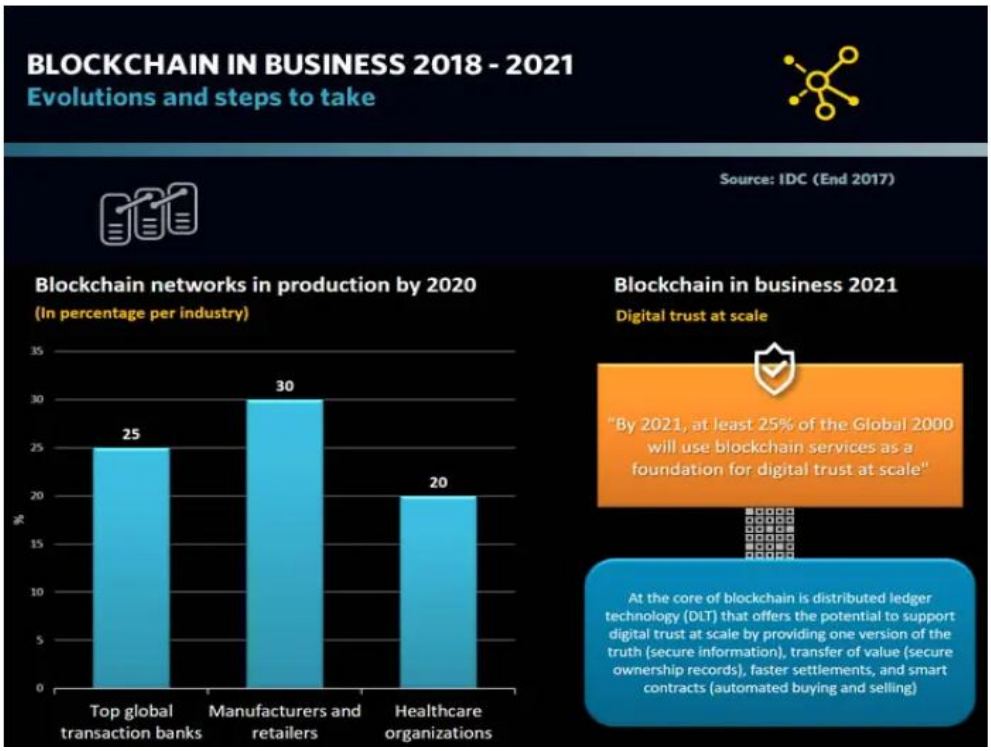

Figure: Blockchain business market
(Source Konashevych 2020, p.413)

Blockchain is often built on anorganization, distributed, or encoded database that acts as a ledger, recording all transactions. Blockchain technology is commonly seen in the realm of cryptocurrencies, notably Bitcoin, which is one of the most prominent cryptocurrencies on the market. If there is a debate about blockchain or distributed ledger technology, the connotation will be of much lesser value (Konashevych 2020). According to, testing of blockchain has revealed that central authorities have very little influence over trade at the international level. The testing and deployment of blockchain technology across a wide range of applications and sectors have demonstrated its limitless future potential.

	Bitcoin	Ethereum	Dash	Litecoin	Monero
Total	16.7 million BTC	96.8 million ETH	7.8 million DASH	54.7 million LTC	15.6 million XMR
Price (USD)	$ 14,729.86	$ 1,082.47	$ 1,067.01	$ 248.93	$ 389.18
Market Cap. (USD)	$248 billion	$106 billion	$8 billion	$13 billion	$6 billion
Transactions / hour	13,609	49,900	614	6,036	220
Sent / hour	121,019 BTC ($1.8 billion USD)	558,178 ETH ($612 million USD)	9,276 DASH ($10 million USD)	559,875 LTC ($140 million USD)	683,751 XRP ($1.63 million USD)
Avg. Transaction Value	8.89 BTC ($131,519 USD)	11.19 ETH ($12,273 USD)	15.10 DASH ($16,146 USD)	92.76 LTC ($23,174 USD)	75.28 XMR ($29,297 USD)
Median Transaction Value	0.366 BTC ($5,416.88 USD)	0.197 ETH ($216.3 USD)	0.605 DASH ($647.12 USD)	10.83 LTC ($2,706.15 USD)	9.35 XMR ($3638.33 USD)
Block Time	9m 17s	15.8s	2m 37s	2m 33s	2m 0s
Blocks Count	503,189	4,875,208	800,814	1,346,832	1,487116
Blocks last 24h	154	5460	548	562	713
Blocks / hour	6	228	23	23	30
Reward Per Block	12.50 BTC ($246,517 USD)	3 ETH ($4,744 USD)	3.60 DASH ($3,867USD)	25 LTC ($6,321 USD)	5.43 XMR ($2,186 USD)
Difficulty	$1.93114*10^{12}$	$2.003*10^{15}$	$70.58*10^{6}$	$3.7*10^{6}$	$75.8 * 10^{9}$
Hashrate (Hash/second)	$15.58 * 10^{18}$	$169.10 *10^{12}$	$1.93 *10^{15}$	$99.98 *10^{12}$	$6.26 * 10^{8}$
Mining Profitability/Day	2.4364 USD	0.1531 USD	0.5493 USD	0.0355 USD	2.4905 USD
Wealth Distribution					
Top 10 addesses	10 - 5.25%	10 - 10.82%	10 - 6.32%	10 - 14.44%	10 - 18.03%
Top 100 addesses	100 - 17.89%	100 - 33.90%	100 - 15.64%	100 - 48.61%	100 - 51.17%
Top 1,000 addesses	1000 - 34.25%	1000 - 53.75%	1000 - 28.53%	1000 - 65.91%	1000 - 71.85%
Top 10,000 addesses	10000 - 55.66%	10000 - 69.61%	10000 - 92.37%	10000 - 79.96%	10000 - 84.29%
100 Largest Transactions in Last 24h	713,840 BTC ($10.56 billion) 24.58% Total	1,055,897 ETH ($1.1 billion) 7.88% Total	128,562 DASH ($137 million) 57.75% Total	2,806,164 LTC ($701 million) 20.88% Total	2,042,328 XMR ($794 million) 13.25% Total
First Block (Genesis)	2009-01-09	2015-07-30	2014-01-19	2011-10-08	2014-04-18
Blockchain Size	178.49 GB	293.11 GB	5.04 GB	12.69 GB	39.22 GB

Table: Global blockchain market
(Source: Leema et al. 2021, p.481)

The internet of things, financial services (insurance, banking, capital markets, and reinsurance), as well as industry 4.0, digital identities, information management, and fraud management, are all areas where DLT and blockchain technology have a bright future. It does not, however, confine blockchain to solely organizations' applications. This technology is being organized by groupings of organizations or businesses to provide unique services where a trust or a blockchain network with third parties without the use of traditional intermediaries is required. In this situation, it is also critical to distinguish between private and public blockchain, as well as blockchain networks, in terms of an organization's relative aim and context. Blockchain has also piqued the interest of security experts since it is a cryptographic ledger that consists of discrete blocks and network validation of transactions (Ballandies et al. 2021). Furthermore, it adds a block to the chain in the form of immutable records or permanent transactions in the digital ecosystem, so adding a layer of trust (Venegas 2020).

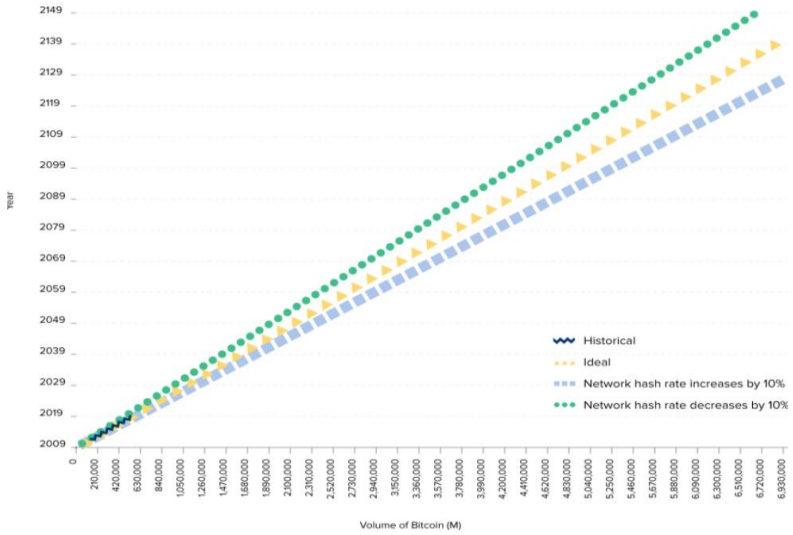

Figure: Cryptocurrency and blockchain market
(Source: Dashkevich et al. 2020, p.182)

All of the world's main stock exchanges are attempting to investigate the possibilities of blockchain in a stock market settlement. The provision of improved security in any technology attracts market customers. All of the main stock exchanges are attempting to settle the stock market by lowering operational costs and transaction times. The existing financial system used in stock markets has relatively high official fees and transaction time, which reduces market efficacy (Dashkevich et al. 2020). The usage of blockchain and DLT aids in automated compliance via smart contacts, which give a higher degree of transparency and security. Many established stock exchanges throughout the globe have already begun to employ technological barriers to increase security. For issuing and distributing private securities, NASDAQ has already begun to use blocks and technologies. The London Stock Exchange, on the other hand, has been exporting technological block chances to other cross-industry divisions of the organizationtorevolutionize securities trading in the European market (Techdayhq.com, 2022). The merits of blockchain technology have been investigated by all other stock exchanges across the world. The use of blockchain will considerably alleviate the problems that the existing financial system in the stock exchanges is experiencing. It has the potential to completely transform the present stock market (Bechtel et al. 2022).

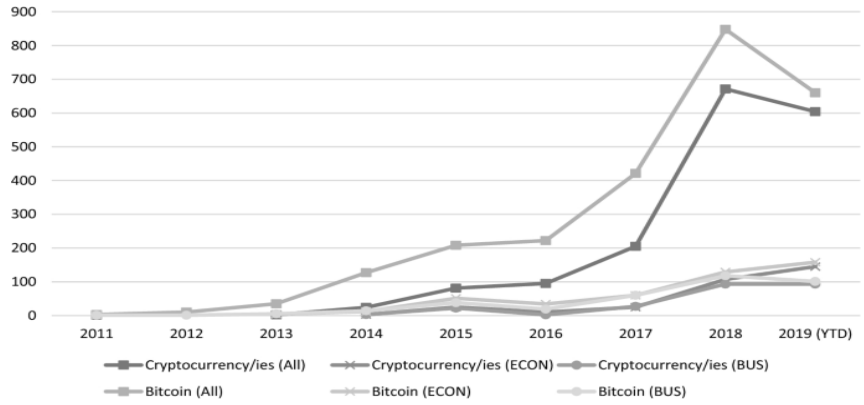

Figure: Cryptocurrency market
(Source: Lipton and Treccani, 2021, p.131)

The asset management sector is expanding rapidly as a result of the expansion of global e-commerce and the increase in daily trade throughout the world. By the end of 2025, the worldwide E-Commerce industry is predicted to increase by USD 150 trillion. The asset management and supply chain networks industry of today is mostly centered on anorganization retail system capable of providing real-time awareness of assets inside the system. The present financial system cannot meet the needs of Asset Management with current technology. Wu et al. (2018) believe that blockchain technology has the potential to establish a ledger system that is effective for asset management and supply chain networks. Existing organization data management technologies can be used to build a distributed ledger system. Technology blocks have the potential to elaborate procedures that are time-consuming and complicated (Lipton and Treccani, 2021). The distributed laser idea allows for direct trade and settlement across international borders, which helps to improve data accuracy, reduce processing delays, and lower total operating costs. However, it exposes the user to misunderstanding mistakes and fraud during an asset exchange between partners in distant regions of the world. The blockchain-related DLTs have the potential to fund the distribution platform and can serve as an excellent example of blockchain technology and its use in the asset management business(Laroiya,Saxena, and Komalavalli, 2020).

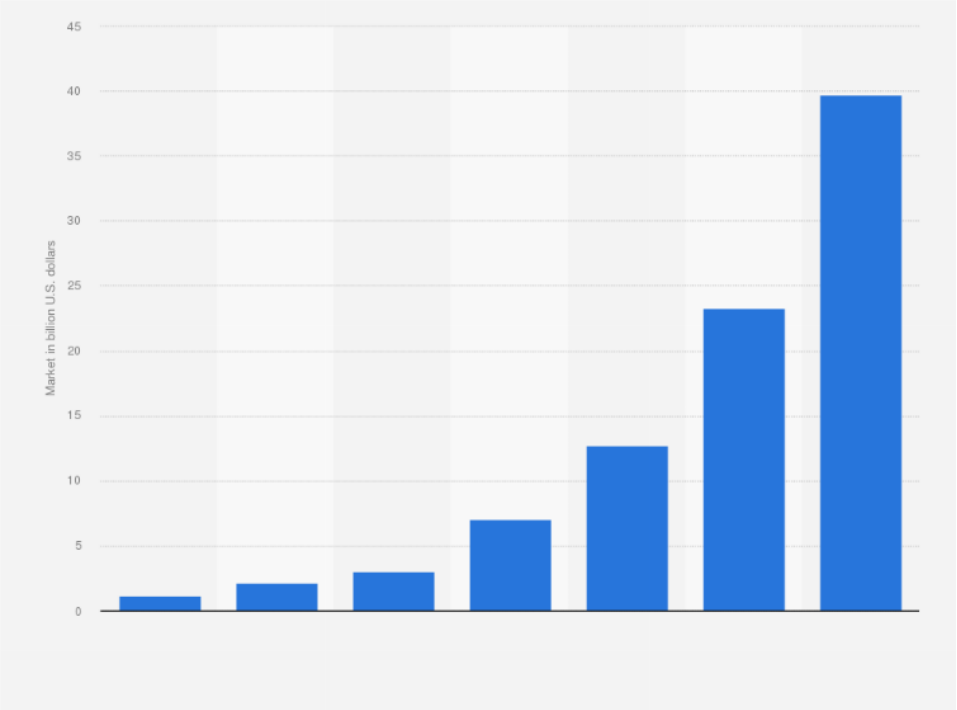

Figure: Global market for blockchain
(Source: Papadaki and Karamitsos 2021, p.31)

KYC is a critical procedure for all financial institutions throughout the world that are responsible for reporting and complying with various market regulators' regulations. According to, all significant financial operators in a certain region are obligated to comply with the local norms and regulations.

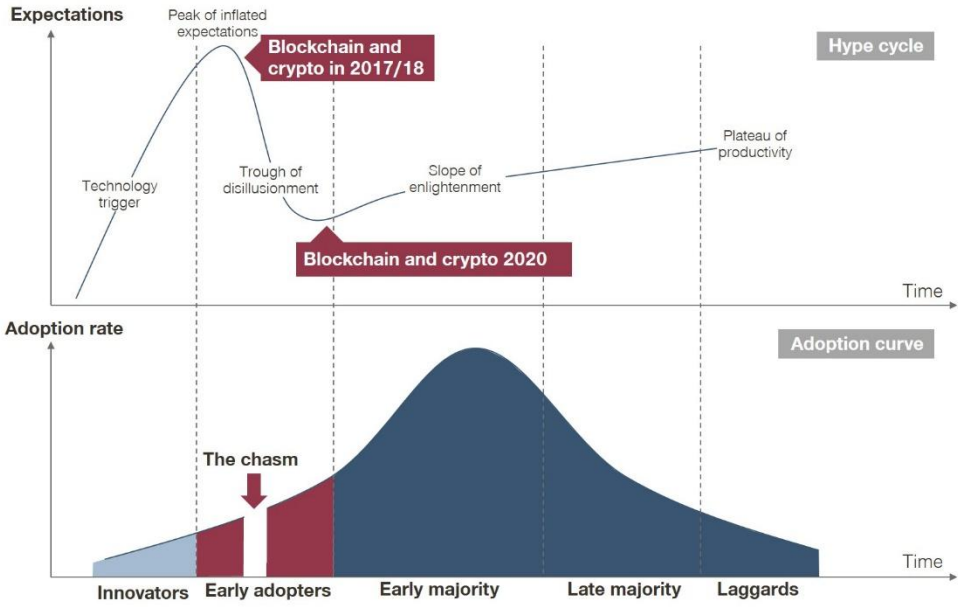

Figure: Impact of blockchain market on business
(Source: Norvill et al. 2019, p.811)

All of the major financial institutions' KYC processes are often error-prone, labor-intensive, and time-consuming. These actions considerably reduce the efficiency of financial organizations by diverting more resources and time away from profitable activities (Papadaki and Karamitsos 2021). KYC chains that are part of blockchain services have the potential to assist financial institutions in expediting their KYC procedure (Norvill et al. 2019). It can offer real-time KYC updates to financial institutions such as banks, eliminating duplication of effort and increasing trust in the system. Blockchain technology aids in automating the client identification process by offering a single source of ID and other critical data, allowing for seamless document exchange between banks and other sources. This approach benefits banks since it allows them to establish bank accounts automatically, increasing their client base in the market(Tezel et al. 2021).

DISCUSSION

Current centralized financial systems are opaque, relying on security intermediates and databases. It indicates that no one will be able to comprehend the underlying workings of the existing financial system unless and until it is hacked from the outside. According, blockchain technology has the potential to incorporate transparency into the system and provide an error-free digital transactional instrument that is almost hard to hack(Sethaput and Innet 2021). Blockchain technology has the potential to solve these issues all at once. Immutable: This particular blockchain characteristic assures that the accessible data is impossible to modify and that it is correct, legitimate, and safe. It aids in the creation of trust between a financial institution and a consumer by dramatically increasing transaction security. Privacy: Blockchain technology can function in both private and public settings. To protect the network's security and the privacy of an individual's transaction, existing blocks and technologies employ both private and public mechanisms. The present banking system does not offer the same level of anonymity as blockchain technology (Reddy and Aithal 2020). Zero-knowledge proof: The present encryption technology aids in preserving information proof without exposing it. It also provides the potential to segregate the data from the verification process. With the usage of this technology, existing financial institutions will be able to verify their users without gaining access to the data, minimizing the likelihood of data breaches. Blockchain has the potential to greatly increase payment transparency by lowering costs for financial services businesses and users. Previously known payment mechanisms were rather sluggish, often taking more than a week. According to the remarks of Bodkhe et al. (2020), blockchain is one of the present market's quickest recognized means of data transport. The blockchain has the capability of transferring payments in real-time. Payments may be made cheaper, quicker, and easier for the user thanks to distributed ledger technology and digital currencies. Furthermore, it may save a substantial amount of time and money for all parties engaged in a single transaction(Mourouzis,and Markou 2022).

CONCLUSION

In the current context, it is possible to infer that blockchain and digital ledger technologies have the potential to revolutionize the financial industry. Furthermore, the limitations of many businesses that are now operating with existing technology can be considerably

mitigated by the adoption of blockchain. It was also discovered that the privacy and security of blockchain users are considerably enhanced since no third party can bridge into any financial transactions with the use of the blockchain.

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