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Research Article

Securing The Future of Financial Services—Exploring The Synergy Of Blockchain And Cybersecurity

Prof. A. Suryanarayana[1*], Dr. Srinivas Bijja[2]

[1*]Former Dean, Faculty of Management Osmania University, HYDERABAD (Telangana State), Mobile: +919848563756,
Mail ID: professorsuryanarayana@gmail.com
[2]Freelancing Management Faculty, HYDERABAD (Telangana State) Mobile Number: +918247592602, Mail ID: sri.bijja@gmail.com

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ABSTRACT

Human error is one of the biggest reasons behind data breaches and banking and insurance organizations are making their transactions tamper-proof and less susceptible to interceptions by significantly removing this factor. Blockchain is becoming synonymous with every industry vertically and is sweeping the globe as it integrates with essential business operations. Blockchain Technology is fully decentralized and uses a ledger-based system to record data and process transactions using multiple computers over networks. The best part about blockchain is that one can put any digital asset onto the chain and initiate a transaction. Unlike traditional Banking Systems, the data will always stay secure, and no intermediaries will be involved. This Article explores how the Banking, Insurance, and other Financial Services industries are exploring various applications of blockchain, their benefits, Cybersecurity implications, and what lies ahead.

Keywords: Blockchain Technology; Cyber Risks; Cybersecurity; Banking & Insurance Sectors; and Use Cases.

Introduction

In today's digital world, the banking and financial services industry witnesses transactions worth trillions of dollars every day, where ensuring transparency, security, and cost-efficiency become a challenge. As per a report, 45% of financial intermediaries, such as payment networks, stock exchanges, and money transfer services suffer from cyber-attacks every year. Blockchain has gained significant importance due to its ability to make digitals transactions flow secure, transparent, and cost-efficient. By using blockchain technology in digital payments, transactions can be executed without the need for intermediaries such as banks, clearinghouses, or financial services providers. Blockchain Technology has the potential to disrupt the banking industry in several ways by offering solutions to many challenges that banks face today. While Blockchain was initially designed to offer an alternative to traditional finance, it is now drawing interest from the financial institutions it was meant to rival. After years of downplaying and ever ridiculing the technology, banks are now realizing that the benefits of Blockchain can no longer be ignored. Many applications of Blockchain in Banking and Insurance sectors offer ways to improve the sector's existing operations and procedures. However, it is also likely that in the future, banks would be implementing Blockchain Solutions designed to exist outside the traditional system. If that happens, the Blockchain challenge to the sector will have been successful. Banks and Insurance companies can be advised about how Blockchain technology could be best utilized for the benefit of the sector.

Review of Relevant Literature

A. Securing the Future of Financial Services & Blockchain Security

There are several articles that offer valuable insights into the evolving landscape of financial services security and the innovative use of Blockchain Technology to address Cybersecurity Challenges.

- An article titled "Securing the Future of Financial Services" discusses various strategies and technologies being implemented to enhance the security and resilience of financial services. It covers the integration of

advanced Cybersecurity measures, regulatory challenges, and innovations in digital finance (ISACA) and (MDPI).

- A publication titled "The Future of Financial Services: Navigating through Disruptions" explores how financial services are adapting to disruptions such as digital transformation, Cybersecurity threats, and changing regulatory landscapes. It emphasizes the need for a proactive approach to safeguard the financial ecosystem.

B. Exploring the Synergy of Blockchain and Cybersecurity

- An article titled "How Effective Is Blockchain in Cybersecurity?" examines the intrinsic features of blockchain, such as immutability and decentralized ledger technology (DLT), and their application in enhancing Cybersecurity. It also discusses the challenges and potential solutions in deploying blockchain for secure communications and transaction validation (ISACA).
- A review Paper titled "Cybersecurity for Blockchain-Based IoT Systems: A Review" highlights the role of blockchain in securing Internet of Things (IoT) systems. It categorizes the Cybersecurity challenges into device security, blockchain security, and network security, and provides an in-depth analysis of potential solutions and future research directions(MDPI).
- A review titled "A Systematic Literature Review of Blockchain Cyber Security" identifies and analyzes peer-reviewed literature that explores the use of blockchain technology for Cybersecurity. It provides insights into how blockchain can mitigate various cyber threats and enhance data security (ISACA).

C. Blockchain Technology

There are several notable references focusing specifically on Blockchain Technology, its principles, applications, and impact across various sectors, including finance. Some of them are as follows:

- The foundational White Paper by Nakamoto, S. (2008) and titled as "Bitcoin: A Peer-to-Peer Electronic Cash System." introduces the concept of blockchain technology through the implementation of Bitcoin. It lays out the fundamental principles and mechanisms of blockchain.
- The Book written by Swan, M. (2015) on "Blockchain: Blueprint for a New Economy," O'Reilly Media, explores the broader implications of blockchain technology, including its potential to revolutionize various industries beyond cryptocurrency.
- The paper written by Yli-Huumo, J., Ko, D., Choi, S., Park, S., & Smolander, K. (2016) and titled "Where is Current Research on Blockchain Technology?—A Systematic Review." PLOS One, 11(10), e0163477, provides a comprehensive review of the current state of blockchain research, highlighting key areas of focus and future research directions.
- The article written by Underwood, S. (2016), "Blockchain beyond Bitcoin." Communications of the ACM, 59(11), 15-17, discusses the applications of blockchain technology beyond Bitcoin, including smart contracts and decentralized applications.
- The authors Tapscott, D., & Tapscott, A. (2016) in their book titled "Blockchain Revolution: How the Technology behind Bitcoin Is Changing Money, Business, and the World." Penguin. delve into how blockchain technology is transforming various sectors, including Finance, Supply Chain Management, and Healthcare.
- The Research Paper written by Zheng, Z., Xie, S., Dai, H., Chen, X., & Wang, H. (2017). "An Overview of Blockchain Technology: Architecture, Consensus, and Future Trends." Proceedings-2017 IEEE 6th International Congress on Big Data, BigData Congress 2017, 557-564 provides a detailed overview of blockchain technology, including its architecture, consensus mechanisms, and potential future trends.
- The article penned by Chen, Y. (2018). "Blockchain Tokens and the Potential Democratization of Entrepreneurship and Innovation" and published in Business Horizons, 61(4), 567-575, explores how blockchain tokens can democratize entrepreneurship and innovation, offering new opportunities for startups and small businesses.
- The review carried out by Hawlitschek, F., Notheisen, B., & Teubner, T. (2018) and titled "The Limits of Trust-free Systems: A Literature Review on Blockchain Technology and Trust in the Sharing Economy", and appeared in *Electronic Commerce Research and Applications,* 29, 50-63, examines the role of trust in blockchain systems, particularly in the context of the sharing economy.

D. Blockchain Impact in Financial Services Sector

- The article by Iazzolino, G., Laise, D., & Gabriele, R. (2020) on "Blockchain Technology and the Insurance Sector: State of the Art and Future Prospects." *Technological Forecasting and Social Change*, 157, 120082 provides an in-depth review of how blockchain technology is being integrated into the insurance sector and discusses future trends.
- Researchers Treleaven, P., Brown, R. G., & Yang, D. (2017) in their article "Blockchain Technology in Finance", *Computer,* 50(9), 14-17, explore the impact of blockchain technology on financial services, discussing both opportunities and challenges.
- Authors Larios-Hernández, G. J. (2017), in their article titled "Blockchain Entrepreneurship Opportunity in the Practices of the Unbanked." *Business Horizons,* 60(6), 865-874, examine the potential for blockchain technology to improve financial inclusion for unbanked populations.

- The study by Nguyen, Q. K. (2016) on "Blockchain—A Financial Technology for Future Sustainable Development" and published in *Procedia Computer Science*, 106, 832-841, discusses the sustainable development aspects of blockchain technology within the financial sector.
- In their article, titled "Blockchain Application and Outlook in the Banking Industry" Financial Innovation, 2, 24 the authors Guo, Y., & Liang, C. (2016) provides a comprehensive overview of blockchain applications in banking and potential future developments.

E. Cyber Risks

There are several references that provide a comprehensive overview of the Cyber Risks associated with Blockchain Technology and Cryptocurrencies, covering various aspects of security challenges, vulnerabilities, and mitigation strategies. Some of the notable references focusing on cyber risks, particularly in the context of blockchain technology and its applications are as under:

- For example, the research study conducted out by Eskandari, S., Clark, J., Barrera, D., & Stobert, E. (2019) and titled, "A First Look at the Usability of Bitcoin Key Management" and published in the Proceedings of the 2019 IEEE European Symposium on Security and Privacy Workshops (EuroS&PW), 95-102, examines the usability and security of Bitcoin key management practices, identifying cyber risks and proposing enhancements.
- The article written by Kshetri, N. (2017) and titled "Will Blockchain emerge as a Tool to Break the Cybersecurity Bottleneck?" IEEE Security & Privacy, 15(2), 10-15, examines whether blockchain can address key Cybersecurity challenges and mitigate cyber risks in various applications.
- A comprehensive Survey was carried out by Conti, M., E, S. K., Lal, C., & Ruj, S. (2018) and titled "A Survey on Security and Privacy Issues of Bitcoin." IEEE Communications Surveys & Tutorials, 20(4), 3416-3452. It discusses security and privacy issues in Bitcoin and blockchain technology, highlighting potential cyber risks and mitigation strategies.
- Another Survey conducted by Li, X., Jiang, P., Chen, T., Luo, X., & Wen, Q. (2017) and titled "A survey on the security of blockchain systems." Future Generation Computer Systems, 107, 841-853 also covers various security vulnerabilities and cyber risks in blockchain systems, including consensus protocol attacks and smart contract vulnerabilities.
- A Paper written by Lin, I. C., & Liao, T. C. (2017) and titled "A Survey of Blockchain Security Issues and Challenges" and as was published in the *International Journal of Network Security*, 19(5), 653-659, provides an overview of security issues and challenges in blockchain technology, focusing on cyber risks and potential solutions.
- A Paper written by Ali, M., Nelson, J., Shea, R., & Freedman, M. J. (2016) entitled "Blockstack: A Global Naming and Storage System Secured by Blockchains," as it appears in the Proceedings of the 2016 USENIX Annual Technical Conference, 181-194 discusses the security architecture of Blockstack, a decentralized naming and storage system, and examines its cyber risk mitigation capabilities.
- A Survey Paper by Bonneau, J., Miller, A., Clark, J., Narayanan, A., Kroll, J. A., & Felten, E. W. (2015) and titled "SoK: Research Perspectives and Challenges for Bitcoin and Cryptocurrencies." 2015-IEEE Symposium on Security and Privacy, 104-121, explores research perspectives on Bitcoin and blockchain security, highlighting key cyber risks and the challenges of securing these systems.
- An Article by Zohar, A. (2015) and titled "Bitcoin: Under the Hood." Communications of the ACM, 58(9), 104-113, provides an in-depth look at the technical underpinnings of Bitcoin and blockchain technology, discussing associated cyber risks and security mechanisms.
- An Article by Atzori, M. (2017) under the title "Blockchain Technology and Decentralized Governance: Is the State Still necessary?" finds a place in the Journal of Governance and Regulation, 6(1), 45-62, and Paper explores the implications of blockchain technology for decentralized governance and discusses potential cyber risks in such systems.
- The Paper written by Mamoshina, P., Ojomoko, L., Yanovich, Y., Ostrovski, A., Botezatu, A., Prikhodko, P., & Zhavoronkov, A. (2018) titled, "Converging Blockchain and Next-generation Artificial Intelligence Technologies to Decentralize and Accelerate Biomedical Research and Healthcare" and published in Oncotarget, 9(5), 5665-5690, investigates the convergence of blockchain and AI technologies, discussing Cybersecurity risks and mitigation strategies in biomedical research and healthcare.

F. Cybersecurity

There are several references that cover a wide range of topics related to blockchain technology and Cybersecurity, providing insights into the security mechanisms, challenges, and potential applications of blockchain in enhancing Cybersecurity across different domains, and its impact on Cybersecurity and some of the notable ones are as under:

- The Paper by Conti, M., Kumar, E. S., Lal, C., & Ruj, S. (2018) titled "A Survey on Security and Privacy Issues of Bitcoin." *IEEE Communications Surveys & Tutorials,* 20(4), 3416-3452, provides an extensive survey of security and privacy issues in Bitcoin, which are inherently linked to blockchain technology, and discusses potential solutions.

- The research Paper presented by Zheng, Z., Xie, S., Dai, H., Chen, X., & Wang, H. (2017). "An Overview of Blockchain Technology: Architecture, Consensus, and Future Trends." Proceedings-2017 IEEE 6th International Congress on Big Data, BigData Congress 2017, 557-564 offers a detailed overview of blockchain technology, including its security aspects, consensus mechanisms, and future trends.
- The Survey carried out by Li, X., Jiang, P., Chen, T., Luo, X., & Wen, Q. (2017). "A Survey on the Security of Blockchain Systems" and published in *Future Generation Computer Systems,* 107, 841-853 covers various security issues in blockchain systems, such as attacks on consensus protocols, smart contracts, and the underlying cryptographic mechanisms.
- A Systematic Review conducted by Momos, M., El-Sappagh, S., Mostafa, M., & Islam, S. M. R. (2020) and titled as "A Comprehensive Review of Blockchain-based Solutions in the e-Health Domain: Ontology, Taxonomy, and Open Issues" is published in *Journal of Network and Computer Applications*, 162, 102693, explores the application of blockchain technology in the e-Health domain, focusing on its potential to enhance Cybersecurity in health information systems.
- A Technical Survey carried out by Tschorsch, F., & Scheuermann, B. (2016) "Bitcoin and Beyond: A Technical Survey on Decentralized Digital Currencies" IEEE Communications Surveys & Tutorials, 18(3), 2084-2123, provides insights into the security features of decentralized digital currencies and how blockchain technology underpins these systems.
- A report by Yaga, D., Mell, P., Roby, N., & Scarfone, K. (2019) titled "Blockchain Technology Overview." *NISTIR* 8202 for National Institute of Standards and Technology offers a comprehensive overview of blockchain technology, including its potential applications in Cybersecurity and its associated challenges.
- An Article by Kumar, A., Sengupta, J., & Zafari, F. (2020). "The Impact of Blockchain on Cybersecurity" *IEEE Security & Privacy*, 18(4), 11-15 discusses how blockchain technology can be leveraged to improve Cybersecurity practices across various industries.
- The Paper presented by Moinet, A., Darties, B., & Baril, M. (2017). "Blockchain-based Trust & Authentication for Decentralized Sensor Networks." Internet of Things (IOT), 2017 IEEE 3rd World Forum, 1-7, explores the use of blockchain for enhancing trust and authentication in decentralized sensor networks, highlighting its security benefits.

Potential Use Cases for Blockchain Technology in Financial Services Sector

Among the many potential use cases for Blockchain, Finance and Insurance Sectors are arguably the most prominent one. The technology's inception, in the form of Bitcoin, was prompted by the 2008 financial crisis, which had devastated the global economy.

The traditional financial system had crashed, forcing governments to issue huge stimulus packages to prop up economies and bail out failing banks. Blockchain aims to address many of the weaknesses that were exposed during the global financial crisis. In this piece, we'll examine what are the use cases for Blockchain in banking and why this nascent technology can help alleviate the sector's biggest pains.

One intriguing application of Blockchain in banking comes from its ability to digitize physical assets. This means that Blockchain can host, among other things, a large variety of digital currencies. We're already familiar with traditional cryptocurrencies like Bitcoin, as well as stable coins which are pegged to a fiat currency/asset or a basket of currencies/assets. These types of projects typically exist outside the traditional banking and finance sector. In recent years, however, a number of commercial and central banks have been working on their own digital currency projects. Perhaps most prominent is the effort by the People's Bank of China (PBoC), which is working on launching its own Central Bank Digital Currency (CBDC). The DC/EP (Digital Currency/Electronic Payments), as the CBDC is called, is currently being piloted in several large Chinese cities. In the commercial banking space, US banking giant J.P. Morgan Chase last week launched its own digital currency dubbed JPM Coin. The coin runs on J.P Morgan's proprietary Blockchain Quorum, with the bank having plans to extend it to other platforms in the future. One intriguing application of Blockchain in banking comes from its ability to digitize physical assets. This means that Blockchains can host, among other things, a large variety of digital currencies. We're already familiar with traditional cryptocurrencies like Bitcoin, as well as *stablecoins,* which are pegged to a fiat currency/asset or a basket of currencies/assets. These types of projects typically exist outside the traditional banking and finance sector.

Problems in Banking Sector Today

The banking industry has been around for centuries serving as a facilitator for a variety of financial and economic activities, including trading, lending and borrowing, transaction processing and settlement, underwriting, and so on. However, this longevity has led to stagnation, with the sector becoming over time slow to adapt to the rapidly changing realities of the digital age. In its current form, the industry resembles a giant that keeps advancing at a steady pace thanks to the tremendous amount of momentum that has been accumulated, but at the same time is too clumsy to be able to gracefully navigate his way forward. For example, many banking operations today still require a lot of paperwork, which costs time and money to process and creates security vulnerabilities. Security systems across the industry need to be beefed up. Banks also need reliable solutions to track credit history and reduce bad credits, improve regulatory compliance and more. All this, while facing a growing challenge from the rising fintech industry.

Blockchain and Insurance

People already know from Bitcoin that Blockchain is great at facilitating transactions, but it can also be used to formalize commercial relationships through smart contracts. This promises to revolutionize the insurance industry by helping to automate processes, facilitate smooth claims, and cut insurance fraud. For example, *Insurwave* is a Blockchain-based marine hull insurance platform. The result of collaboration between companies like A.P. *Moller-Maersk Group***,** ACORD, and Microsoft, the platform was projected to facilitate 500,000 automated transactions and handle risk for more than 1,000 commercial vessels in its first 12 months. Insurwave provides vital real-time information to insurers and the insured, including ship location, condition, and safety hazards.

So if a ship enters a high-risk area, the system detects this and factors it into insurance calculations. In another example, Nationwide Insurance Company is trialing a proof-of-insurance Blockchain Solution called "RiskBlock" that would allow law enforcement and other insurers to verify insurance coverage in real-time.

Use Cases of Blockchain in Financial Services

Blockchain is expected to revolutionize the banking business, and it's no surprise that it is changing how customers conduct transactions. It replaces and streamlines the traditional banking processes with innovative approaches that are more secure, efficient, cost-effective, and transparent. The following are some of the ways that blockchain is revolutionizing digital banking.

- ***Blockchain Expedites International Transfers.***

Capital markets comprise issues and investors matched according to corresponding risk and return profiles. Firms suffer from a lack of stringent monitoring and regulatory practices and have liquidity risks, interest rate volatility, and other financial issues. Blockchain shows potential in transforming capital markets by eliminating operational hazards responsible for fraud and human error and reducing overall counterparty risks. The digitization and tokenization of financial products and assets make it much easier to trade, promote global inclusivity, increase connectivity, and practice fractionalized ownership, all of which reduce capital costs and increase liquidity.

- ***Blockchain Creates an Audit Trail.***

Blockchain can improve the security of banking transactions by eliminating financial fraud and data redundancies and by maintaining a clear audit trail. Thousands of ledgers protect blockchain networks; data cannot be changed unless all network users approve it. This makes it exceedingly difficult for hackers to penetrate and compromise sensitive information, thus saving victims from losses of hundreds or thousands of dollars. Organizations may add an extra layer of protection by using VPN services to enhance security alongside blockchain services.

- ***Blockchain Reduces Costs for Customers and Banks.***

Blockchain can automate banking processes, translating to faster processing of payments, loans, and seamless transactional workflows. Poor record-keeping and reconciliation costs are very high and can potentially lead to cases of fraud. Many facets of digital transactions may be automated using blockchain, which increases productivity and reduces vulnerability to cyber threats. Financial institutions can address most of the challenges associated with speed and costs by implementing blockchain ledgers. The technology significantly reduces overheads and additional expenses by eliminating traditional paperwork involved with banking. There is no need for third parties or intermediaries.

- ***Blockchain Ensures Compliance.***

Blockchain improves network governance by standardizing processes and automating compliance. It is necessary for financial institutions to ensure that they stay compliant in the landscape of complex regulatory changes, especially when operating beyond borders. Regulatory compliance is crucial in trading and e-Commerce spaces as well. Blockchain simplifies financial operations in real-time and streamlines reporting and transaction verification. Its immutable ledgers and asset digitization eliminate the risk of fraud and enable faster settlements.

- ***Blockchain Secures Private Messaging and Cyber-physical Infrastructures.***

Hackers increasingly turn to social media to attack users and target platforms like Facebook and Twitter. Millions of accounts get breached every year due to information falling into the wrong hands, and messaging systems get intercepted.

Blockchain can be used to standardize communications across various messaging channels and enhance security for enterprises. It can encrypt communications between parties and ensure that data doesn't get intercepted. When properly implemented, it can prevent unauthorized parties from tampering with financial transactions, eliminate identity impersonation, and safeguard digital interactions. Blockchain can be used for cyber-physical infrastructure to ensure authentication, security, and traceability. It can also simplify payment flow and prevent fraud and counterfeiting. This can help combat internal threats and prevent unauthorized

access to data by ensuring overall trustworthiness and integrity. Experts have seen many cases where hackers infiltrated networks and gained complete control over critical functions. Such incidents can be avoided by verifying data on blockchains for adding new entries or editing them.

Blockchain Helps Reduce Cyber Risk

Organizations can address potential security gaps by shifting their focus from enterprise to network-level Cybersecurity. Several industry regulators can enjoy the open dialogue, and policymakers acknowledge the unique advantages of blockchain technologies, including their Cybersecurity benefits. Cyber threats plague the financial industry, and as new threats emerge, it is imperative to safeguard personal information. Retail banking sectors are investing significantly in blockchain frameworks, and most new initiatives haven't been rolled out at scale. The regulatory requirements are demanding, and the future regulation of blockchain technology will stay uncertain. The UK's Financial Conduct Authority (FCA) is formulating policies for using blockchain, while the United States is convinced it has inherent risks. Blockchain-based ETFs have been blocked by the Securities and Exchange Commission (SEC) in the U.S., though traditional banks lose up to USD 20 billion due to identity fraud, and blockchain ledgers help combat fraud by protecting data and preventing money laundering through automation and standardization.

Blockchain enables customers to use a unique identifier via a digital fingerprint and helps prevent the overlap of KYC and AML checks. Individual management of private keys can help customers safe keep their data and control with whom they share it. Furthermore, blockchain decentralizes financial exchanges and promotes greater interconnectedness among global financial ecosystems. While banks explore the use of permissioned blockchains, the technology's distributed architecture increases overall cyber resiliency. This prevents sensitive information from being compromised via a point of failure or single access point. A key feature of blockchain is its various consensus mechanisms, which improve the integrity of shared ledgers. Blockchain enhances the robustness of financial systems and makes consensus a prerequisite for network participants. All blocks in chains must be validated before new information is added or edited. It's challenging to corrupt blockchains since participants are given enhanced transparency, and blockchains hosted on the cloud come with additional Cybersecurity protections. The takeaway is that blockchain technology can improve an organization's overall Cybersecurity posture by enhancing cyber resiliency against emerging threats.

Pathways and Road Ahead for Blockchain Technology

What Does the Future Hold for Blockchain? The Society for Worldwide Interbank Financial Telecommunications (SWIFT) is working with banks worldwide on global payment initiatives and trying to improve the cross-border payments experience. SWIFT implements blockchain technologies by working with active providers and enabling banks to allow customers to pay with fiat currencies and cryptocurrency. Blockchain technology is being leveraged to significantly reduce the number of participants needed to resolve banking-related queries and to ensure compliance, which means we are already seeing some significant improvements.

The growth of blockchain-based payment solutions will continue to progress and enterprises will witness the adoption of the technology at scale. Several companies are experimenting with "tokenization" to encrypt digital assets for secure transactions, though this is still in its early stages of development. Banks are using blockchain for digital fingerprinting and universal customer identification due to its decentralized nature. They will continue to disseminate information while it is updated and reduce the information burden during the authentication and verification processes. Blockchain will be used to verify firmware updates and patches and prevent unauthorized access or attempts to install malware. Smart contracts show users the potential to automate payments by using predetermined conditions and automatically reducing fraud by reducing human interference. The technology manages complex reconciliation activities like invoice creation, financial decision-making, loan approvals, and application processing. A significant benefit of using blockchain is increased access to banking services and the opening of new economic streams to the global unbanked population. The future of blockchain in Cybersecurity for the banking industry is uncertain, but one thing is clear – it will continue to improve asset security and payment outcomes for organizations.

Concluding Comments

There are many benefits associated with Blockchain technology that have allowed banks, financial institutions, and fintech companies to provide better service as well as offer more security to customers. With Blockchain Technology & Banking Software solutions, many financial institutions have been in a position to improve their operations and become more competitive in the banking industry. Blockchain shows promise in modern banking; however, the technology is new, and there are still challenges to overcome. Banks are facing pressing issues with its implementation, and although there is worldwide enthusiasm, governments have yet to recognize and approve of its use cases. However, this isn't stopping its adoption, and blockchain can improve the state of capital markets, cross-border transactions, and trade finance in the future. Although it may take years for Blockchains to become commonplace, one can cite several examples to show how Blockchain can be used to automate business processes, provide better value for customers, improve data security, and one only needs to watch this space as other industries follow suit. Blockchain is just one of 25 technology trends that are believed by experts to transform human societies in the near future.

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