

CRYPTO CURRENCY

"Crypto is the wild frontier of finance—high risk, high reward, and no sheriffs in sight."



► **WeChat**

Richa Harpalani

PR Manager, ChainGPT

Post Graduate Program(PGP) in Media &
Entertainment Management(2018-19)

MESSAGE FROM THE DIRECTOR

Dear Readers,

It gives me great pride to introduce SAMVAD's edition every month. Our SAMVAD team's efforts seem to be paying off, and our readers seem to be hooked onto our magazine. At WeSchool, we try to acquire as much knowledge as possible and share it with everyone.



Prof. Dr. Uday Salunkhe
Group Director

As we begin a new journey with 2023, I sincerely hope that SAMVAD will reach new heights with the unmatched enthusiasm and talent of the entire team.

Here at WeSchool, we believe in the concept of AAA: Acquire Apply and Assimilate. The knowledge you have acquired over the last couple of months will be applied somewhere down the line. When you carry out a process repeatedly, it becomes ingrained in you and eventually tends to come out effortlessly. This is when you have assimilated all the knowledge that you have gathered.

At WeSchool, we aspire to be the best and unique, and we expect nothing but the extraordinary from all those who join our college. From the point of view of our magazine, we look forward to having more readers and having more contributions from our new readers.

SAMVAD is a platform to share and acquire knowledge and develop ourselves into integrative managers. Our earnest desire is to disseminate our knowledge and experience with not only WeSchool students but also the society at large.

Prof. Dr. Uday Salunkhe,
Group Director

ABOUT US



OUR VISION

“To nurture thought leaders and practitioners through inventive education.”

CORE VALUES

Breakthrough Thinking and Breakthrough Execution

Result Oriented, Process Driven Work Ethic

We Link and Care

Passion

“The illiterate of this century will not be those who cannot read and write, but those who cannot learn, unlearn and relearn.” -Alvin Toffler.

At WeSchool, we are deeply inspired by the words of this great American writer and futurist. Undoubtedly, being convinced of the need for a radical change in management education, we decided to tread the path that led to the corporate revolution.

Emerging unarticulated needs and realities require a new approach in both thought and action. Cross-disciplinary learning, discovering, scrutinizing, prototyping, learning to create and destroy the mind's eye needs to be nurtured differently.

WeSchool has chosen the ‘design thinking’ approach towards management education. All our efforts and manifestations, as a result, stem from the integration of design thinking into management education. We dream of creating an environment conducive to experiential learning.

FROM THE EDITOR'S DESK

Dear Readers,

Welcome to the **151st** Issue of **Samvad**!

SAMVAD is a platform for “Inspiring Futuristic Ideas”, we constantly strive to provide thought-provoking articles that add value to your management education.

We have an audacious goal of becoming one of the most coveted business magazines for B-school students across the country. To help this dream become a reality, we invite articles from all management domains, giving a holistic view and bridging the gap between industry veterans and students through our WeChat section.

This edition brings a refreshing take on the growing landscape of Cryptocurrency by Richa Harpalani, PR Manager, ChainGPT.

In today’s digital economy, cryptocurrency is revolutionizing how people perceive and use money. As decentralized digital assets operating on blockchain technology, cryptocurrencies provide an alternative to traditional financial systems by offering transparency, security, and borderless transactions. According to a Statista report, the global cryptocurrency market is projected to reach \$5 trillion by 2030, driven by increasing adoption and regulatory advancements.

Cryptocurrency has witnessed significant growth worldwide, with over 420 million users as of 2024, as per Triple-A research. Bitcoin, the pioneer cryptocurrency, holds a dominant market capitalization exceeding \$800 billion, while Ethereum, Binance Coin, and Solana continue to expand their ecosystems. The rise of decentralized finance (DeFi) and non-fungible tokens (NFTs) has further cemented crypto’s role in reshaping industries beyond payments, including gaming, supply chain, and art. Leading financial institutions and corporations are embracing blockchain technology, with JPMorgan, Tesla, and Visa integrating digital assets into their operations.

FROM THE EDITOR'S DESK

India's cryptocurrency market is one of the fastest-growing globally, with over 100 million crypto investors, according to a Chainalysis report. Despite regulatory uncertainties, digital asset adoption has surged due to a tech-savvy youth population and increasing financial inclusion. The Reserve Bank of India (RBI) has taken a cautious stance, yet innovation persists with blockchain-based projects and the government's push for a central bank digital currency (CBDC). Crypto exchanges in India, such as WazirX and CoinDCX, have reported exponential growth, highlighting the market's potential.

However, the crypto industry faces challenges such as regulatory scrutiny, volatility, and cybersecurity threats. Governments worldwide are introducing frameworks to address concerns around fraud, tax compliance, and consumer protection. The European Union's Markets in Crypto-Assets (MiCA) regulation and the U.S. Securities and Exchange Commission's (SEC) oversight efforts reflect the evolving regulatory landscape.

Another emerging trend in cryptocurrency is the rise of stablecoins and central bank digital currencies (CBDCs). Stablecoins, like USDT and USDC, offer price stability, making them attractive for payments and remittances. CBDCs, backed by central banks, aim to blend the benefits of digital currencies with regulatory oversight. China's digital yuan and India's e-rupee initiatives signal a growing shift toward state-backed digital assets, potentially reshaping global finance.

Cryptocurrency continues to evolve, reshaping financial systems through decentralization and blockchain innovation. By integrating advanced security, regulatory compliance, and mainstream adoption, the industry is set to become a cornerstone of the digital economy. As governments, institutions, and individuals navigate the complexities of digital assets, the future of cryptocurrency will be defined by innovation, resilience, and financial inclusivity.

We hope you have a great time reading SAMVAD!

Let's read, share and grow together!

Best Regards,
Team Samvad

Index



Pg. No.

WeChat | 1

ARTICLES

The Steelyard of Stability | 4

Cyberscurity Risk Assessment: A Framework for Modern Business | 8

A Role of Interest Rates and Fluctuations in Global Markets in Investor Risk and Strategies Mitigation | 14

WeAchievers | 18

Team Samvad | 21

Previous Magazines | 22



Richa Harpalani

PR Manager, ChainGPT
Post Graduate Program(PGP) in Media & Entertainment Management(2018-19)

Could you kindly provide a brief overview of your professional journey, highlighting your experiences and career progression since your time at WeSchool?

My journey began at WeSchool during a pivotal time in my life. What started as a decision driven by necessity transformed into a passionate pursuit of knowledge. Moving from Pune to Mumbai was a significant step, and I took the initiative by researching and applying to Mumbai's top PR agency. This proactive approach led to my first professional role, where I spent 2.5 years gaining invaluable PR experience. However, I consistently felt there was potential for more significant challenges and growth opportunities. This realization led me to explore possibilities beyond traditional PR, which ultimately paved the way for my career in the Web3 space. Over the years, I have worked for over 70 startups in different PR agencies, co-founded one company, and now play a key role in growing the ChainGPT ecosystem.

How are regulatory frameworks evolving for the cryptocurrency industry, and what are the key challenges and opportunities arising from these changes?

In India, crypto is not recognized as legal tender, and the industry faces significant regulatory challenges. While crypto trading is not explicitly banned, the government has imposed high taxation (30% on crypto gains, 1% TDS on transactions) and lacks a clear regulatory framework. The uncertainty surrounding crypto regulations has led to challenges for Web3 startups, investors, and developers operating in the space. Peer-to-peer (P2P) transactions have become nearly impossible, and major exchanges like WazirX are struggling, falling prey to scams and regulatory crackdowns. This uncertainty makes it hard for Web3 startups, investors, and developers to operate, forcing many to move to crypto-friendly countries.

Some nations, like the UAE and Singapore, are establishing progressive crypto-friendly policies; others, like China and India, impose strict taxation,

regulatory hurdles, or even outright bans on specific aspects of the industry. If India establishes a well-defined regulatory framework, it could unlock massive growth in Web3 innovations. Until then, businesses must operate cautiously while pushing for clearer regulations.

With the rise of decentralized finance (DeFi), what impact do you foresee on traditional financial intermediaries, and how might they need to adapt to remain competitive?

DeFi is practically nonexistent in India due to strict regulations and banking restrictions. Currently, Indian exchanges are struggling to function because banks do not support crypto transactions. Users cannot transfer crypto holdings from an exchange to their bank accounts, making cashing out nearly impossible. With P2P transactions also becoming harder, most people are stuck with assets they can't easily convert to fiat. This has forced many exchanges to shut down or move operations abroad, leaving Indian users with limited options.

Right now, India is missing out on the DeFi revolution due to unclear policies. Unless regulations evolve, Indian investors and Web3 businesses will continue looking for opportunities in crypto-friendly jurisdictions, leaving India behind in the global fintech race.

How will the development of Web3 and the Metaverse impact the crypto asset management industry?

Web3 and the Metaverse are transforming digital ownership, creating new opportunities in asset management. Tokenized assets, DAOs, and automated portfolio management are reshaping investments. However, challenges like volatility, regulation, and security risks remain. To thrive in this evolving landscape, the industry must prioritize security, compliance, and innovation.

How will the development of Web3 and the Metaverse impact the crypto asset management industry?

AI is becoming a big part of crypto, but it brings challenges. AI is making crypto trading faster and smarter, but it's also creating problems for regular investors. Big institutions and professional traders use AI to predict prices and execute trades in milliseconds, giving them a huge advantage over everyday traders.

Retail investors might struggle to make profits, as AI-powered trading bots can manipulate prices, buy or sell before them, and react to market changes instantly. Since most people don't have access to such advanced tools, they could lose money or get worse trade prices.

To keep things fair, we need transparent

AI models, better regulations, and tools that help retail investors compete in an AI-driven market.

What advice would you give to students who are considering a career in cryptocurrency and blockchain technology?

If you want to build a career in crypto and blockchain, start by learning the basics to understand how blockchain, smart contracts, and DeFi work. But don't just stop at theory get hands-on experience by joining hackathons, contributing to open-source projects, or even becoming community managers.

The industry moves fast, so stay updated by following credible sources and engaging with Web3 communities. One piece of advice would be to find your niche and not just follow the crowd or follow any trends. Very few people understand crypto and blockchain, which makes me stand apart. You should pick your niche and work on becoming the best at what you do.

Technological Advancements and Crypto: Exploring How Blockchain Advancements Could Influence Cryptocurrency Adoption in India



Winner

Shah Vrund Bhavinkumar
Shah Khushi Rakeshkumar
MBA
IIM, Vishakhapatnam



Introduction

The swift advancement of blockchain technology is driving substantial changes across multiple industries, particularly finance. One of the most notable implementations of blockchain is cryptocurrency, a digital or virtual currency secured by cryptography. In India, the uptake of cryptocurrency has been a subject of extensive debate and conjecture. This article explores how the progress in blockchain technology might impact the adoption of cryptocurrency in India, considering the present regulatory framework, technological infrastructure, and socio-economic considerations.

Blockchain Technology: The Backbone of Cryptocurrency

Blockchain technology, known for its decentralized and unchangeable ledger system, provides transparency, security, and efficiency in transactions. Recent developments in blockchain have brought about features like smart contracts, enhanced consensus algorithms, and interoperability. These innovations have the potential to transform numerous sectors, including finance.

- **Smart Contracts:** Smart contracts, self-executing agreements with the terms embedded in code, automatically carries out transactions when specific conditions have been fulfilled, which will lead to minimize the need for intermediaries and increasing transaction efficiency. Implementing smart contracts in India could simplify numerous processes, from financial transactions to supply chain management, and enhance trust in digital systems.
- **Improved Consensus Algorithms:** Traditional consensus mechanisms like Proof of Work (PoW) consumes a lot of energy and are relatively slow. Newer algorithms, such as Proof of Stake (PoS) and Delegated Proof of Stake (DPoS), provide relatively higher energy-efficient and faster options. These improvements can make blockchain networks more scalable and eco-friendlier, addressing key concerns related to cryptocurrency mining.

- **Interoperability:** Interoperability between different blockchain networks enables smooth data exchange and collaboration. This can result in the development of more robust and versatile applications, encouraging the widespread adoption of blockchain technology across various sectors, including finance.
- **Scalability Solutions:** Advancements such as sharding and layer-2 solutions are tackling blockchain's scalability problems, potentially allowing for faster and cheaper transactions. This could make cryptocurrencies more practical for everyday use in India's high-volume transaction environment.

Cryptocurrency Adoption in India: Current Scenario

India's stance on cryptocurrency has been ambivalent, with the government oscillating between regulatory crackdowns and potential embrace. Despite regulatory uncertainties, the Indian cryptocurrency market has seen substantial growth. According to a report by Chainalysis, India ranked first in the 2023 Global Crypto Adoption Index, highlighting the growing interest in digital currencies among Indian users. Furthermore, The India cryptocurrency market crosses US\$ 250 million by 2023 and is expected to grow at a CAGR of about 9.2% during the forecast period of 2023-2028.

Several factors contribute to the increasing adoption of cryptocurrency in India:

- **Rising Digital Literacy:** With the proliferation of smartphones and internet access, digital literacy in India has seen a significant boost. In 2023, India had more than 1.2 billion internet users nationwide. This number is expected to significantly increase to 1.6 billion by 2050, showcasing a market potential for internet services in the South Asian nation. This digital savvy population is more likely to explore and adopt cryptocurrencies
- **Remittances and Cross-border Transactions:** India is one of the largest recipients of remittances globally, receiving \$111 billion in 2022

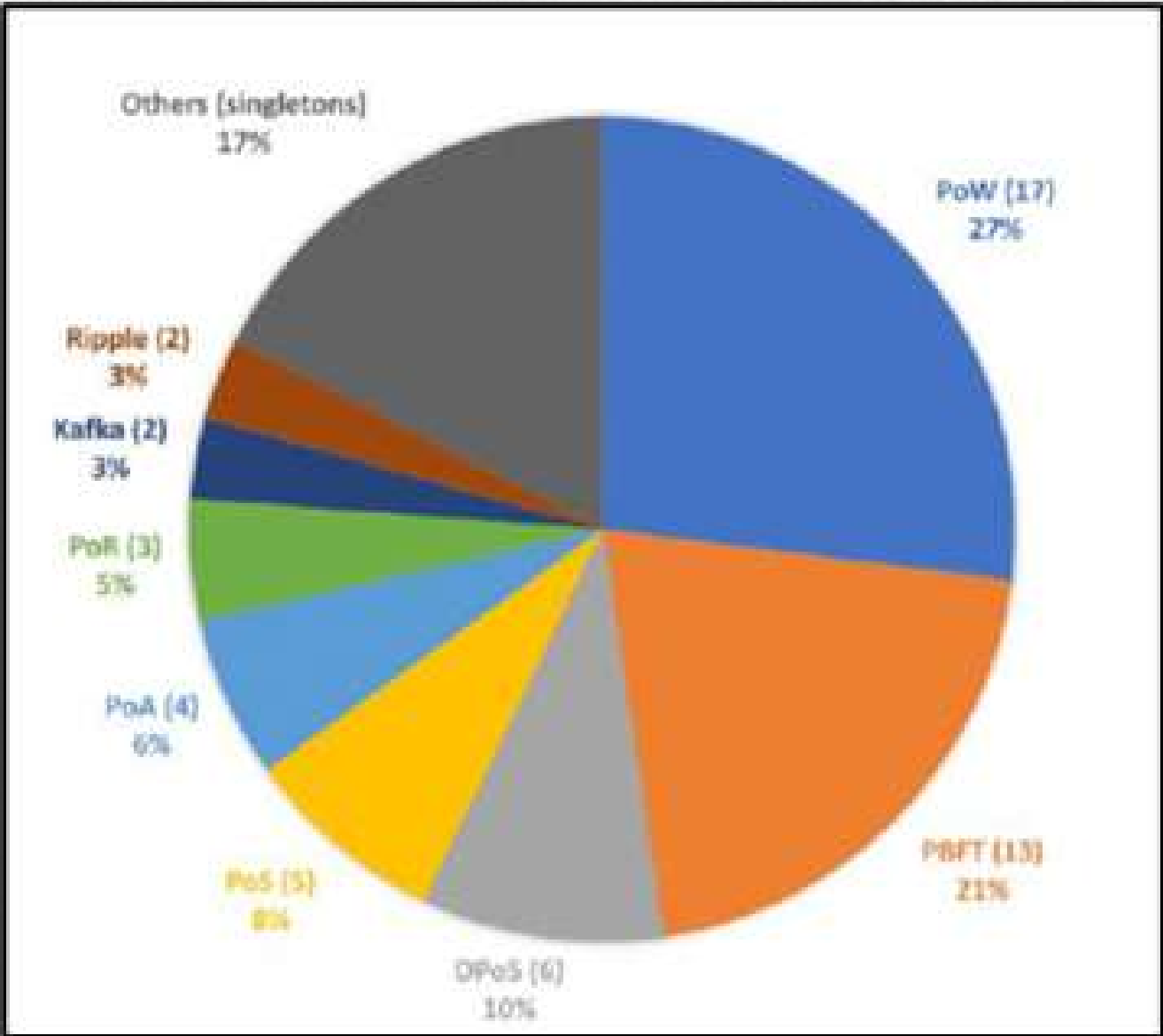


Figure 1 Consensus Mechanisms

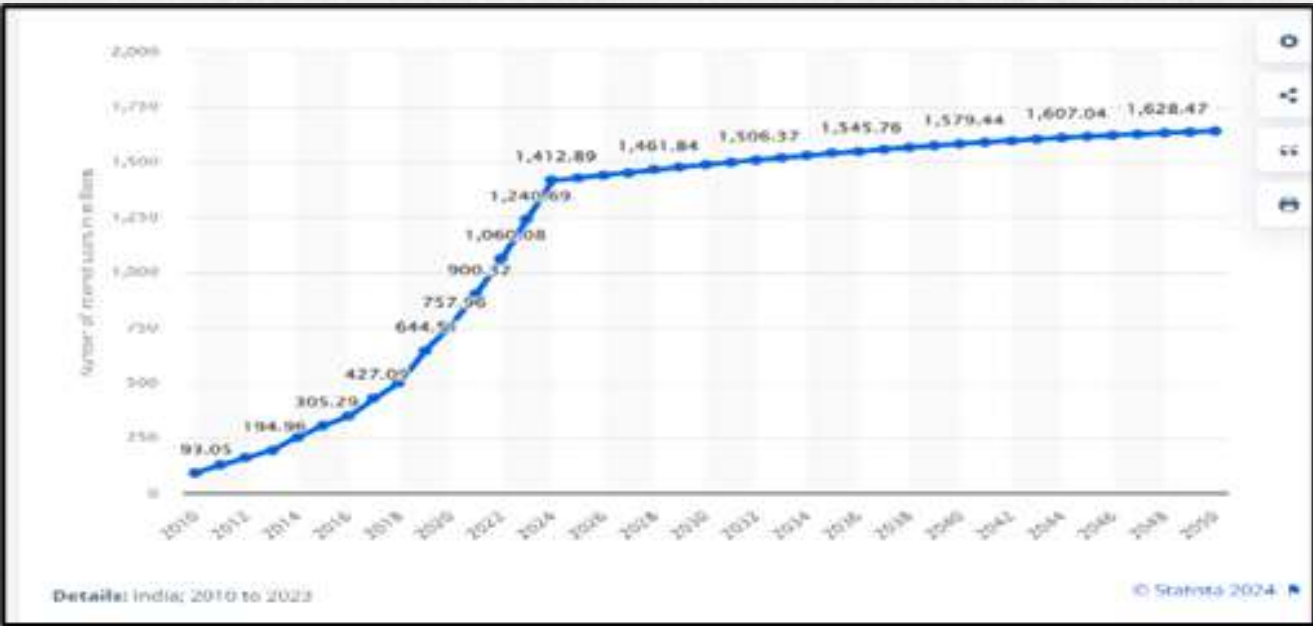


Figure 2 Rising Digital Literacy



Figure 3 Remittances by World Bank

with overall remittances worldwide as \$831 billion according to the World Bank. Cryptocurrencies offer a faster and cheaper alternative to traditional remittance channels, making them an attractive option for many Indians.

- **Inflation and Economic Instability:** Economic instability and inflation concerns have driven people to seek alternative investment avenues. Cryptocurrencies, with their potential for high returns, have emerged as a popular choice.

Technological Advancements and Their Impact on Adoption

The advancements in blockchain technology can significantly influence cryptocurrency adoption in India by addressing some of the key challenges faced by the sector.

- **Security and Fraud Prevention:** Enhanced security features of blockchain can mitigate the risks of fraud and cyberattacks, which are major concerns for potential cryptocurrency users. The use of advanced encryption techniques and decentralized verification processes ensures the integrity of transactions and user data.
- **Regulatory Compliance:** Technological advancements can also support regulatory compliance.

Blockchain's transparency and traceability can assist regulators in monitoring transactions and ensuring adherence to anti-money laundering and KYC regulations. This can enhance trust among users and regulators, creating a more favourable environment for cryptocurrency adoption.

- **Financial Inclusion:** In a nation with a large unbanked population, blockchain technology can be crucial in promoting financial inclusion. Decentralized finance (DeFi) platforms, which utilize blockchain technology, can offer financial services to individuals without access to traditional banking infrastructure. This can democratize financial services access and stimulate economic growth.
- **Tokenization of Assets:** Tokenization is the process in which physical assets are converted into digital tokens on a blockchain which has the potential to revolutionize the way assets are traded and owned. This can include real estate, commodities, and even intellectual property. In India, where land ownership disputes are common, tokenization can offer a transparent and immutable record of ownership, reducing conflicts and enhancing trust.

- **Central Bank Digital Currencies (CBDCs):** The development of CBDCs, like India's digital rupee, could serve as a bridge between traditional finance and cryptocurrencies. While not a cryptocurrency itself, a CBDC could familiarize people with digital currencies and potentially ease the transition to adopting decentralized cryptocurrencies.
- the widespread adoption of cryptocurrency.
- **Public Awareness and Education:** Misinformation and lack of awareness about cryptocurrencies can hinder their adoption. Public education campaigns and initiatives to demystify blockchain technology and cryptocurrencies are crucial for building trust and acceptance among the general population.
- **Energy Consumption:** The significant energy consumption of certain blockchain networks, especially employing Proof of Work consensus mechanisms, is an increasing concern. This issue is particularly pertinent in India, where energy demand often exceeds supply in many regions.

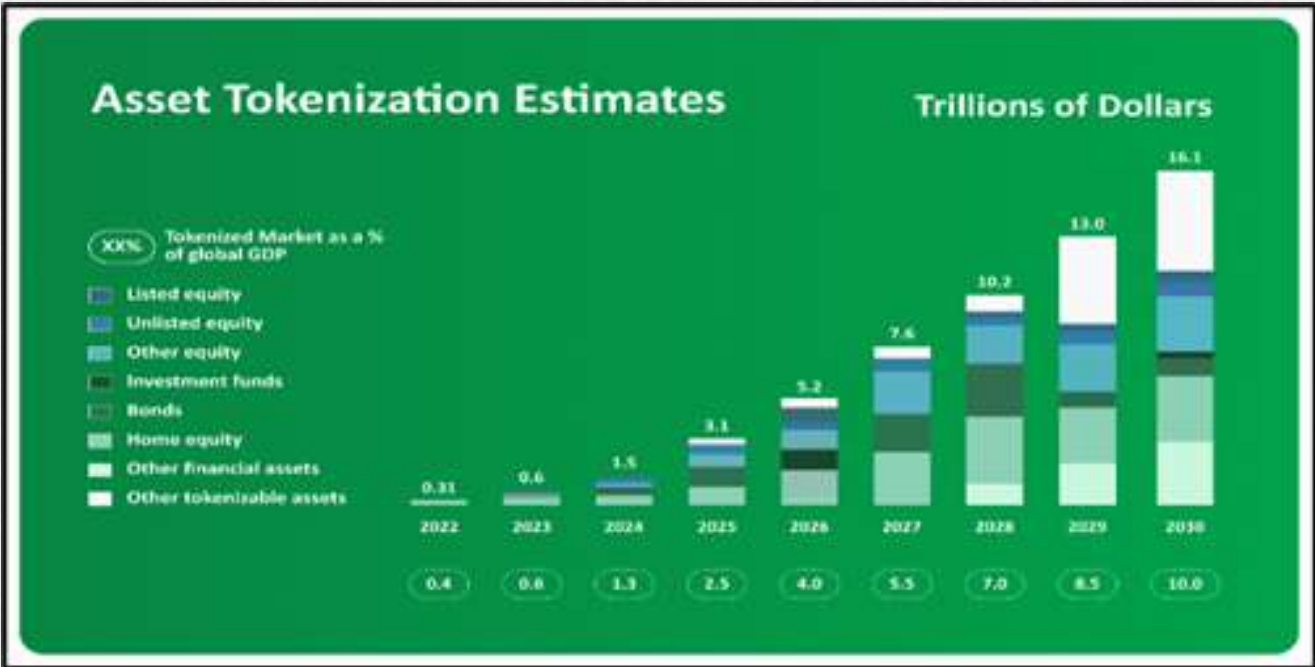


Figure 4 Tokenization of Assets

Challenges and the Road Ahead

While technological advancements offer promising prospects for cryptocurrency adoption in India, several challenges remain

- **Regulatory Uncertainty:** The lack of clear regulatory guidelines continues to be a significant hurdle. In early 2023, India implemented a 30% tax on profits from cryptocurrency transactions and a 1% TDS on transfers of virtual digital assets, indicating a recognition of the sector but also potentially deterring some users due to high taxation.
- **Technological Infrastructure:** While digital literacy is on the rise, the technological infrastructure in many parts of India remains inadequate. Ensuring robust and widespread internet connectivity is essential for



Figure 5 Challenges in adoption of Blockchain

The Role of Enterprise Blockchain Adoption

Enterprise blockchain adoption in India is expected to grow significantly, potentially paving the way for wider cryptocurrency acceptance. According to NASSCOM, Indian enterprises' adoption of blockchain technology is expected to grow at a CAGR of over 37.8%, FY 2019-2025. This growing

familiarity with blockchain in business settings could spill over into increased comfort with cryptocurrencies among the public.

Conclusion

The advancements in blockchain technology have the potential to significantly influence cryptocurrency adoption in India by addressing key challenges and enhancing the overall efficiency, security, and accessibility of digital transactions. However, the journey towards widespread adoption will require a collaborative effort between the government, regulatory bodies, technology providers, and the general public. By fostering a supportive regulatory environment and investing in technological infrastructure and public education, India can harness the full potential of blockchain technology and position itself as a leader in the global cryptocurrency landscape.

References:

- 1.https://www.researchgate.net/figure/Pie-chart-showing-the-usage-of-various-consensus-mechanisms-in-the-surveyed-works_fig4_359280861
2. [India: number of internet users 2050 | Statista](#)
3. [The Role of Crypto in Remittances: Revolutionizing Global Money Transfers | by Ulrik K. Lykke | Medium](#)
- 4.<https://www.landshare.io/blogs/multichain-and-real-world-assets-how-tokenized-economies-and-cross-chain-systems-pave-the-way-for-interoperability>.

<https://www.linkedin.com/pulse/blockchain-adoption-challenges-overcoming-barriers-enterprise/> 6. An overview of the cryptocurrency regulations in India (cointelegraph.com) 7. Blockchain: A revolutionary change or not? | nasscom)

Simplifying the Supply Chain

Smart Contracts in Operations Management: Leveraging smart contracts to automate and optimize operational workflows.

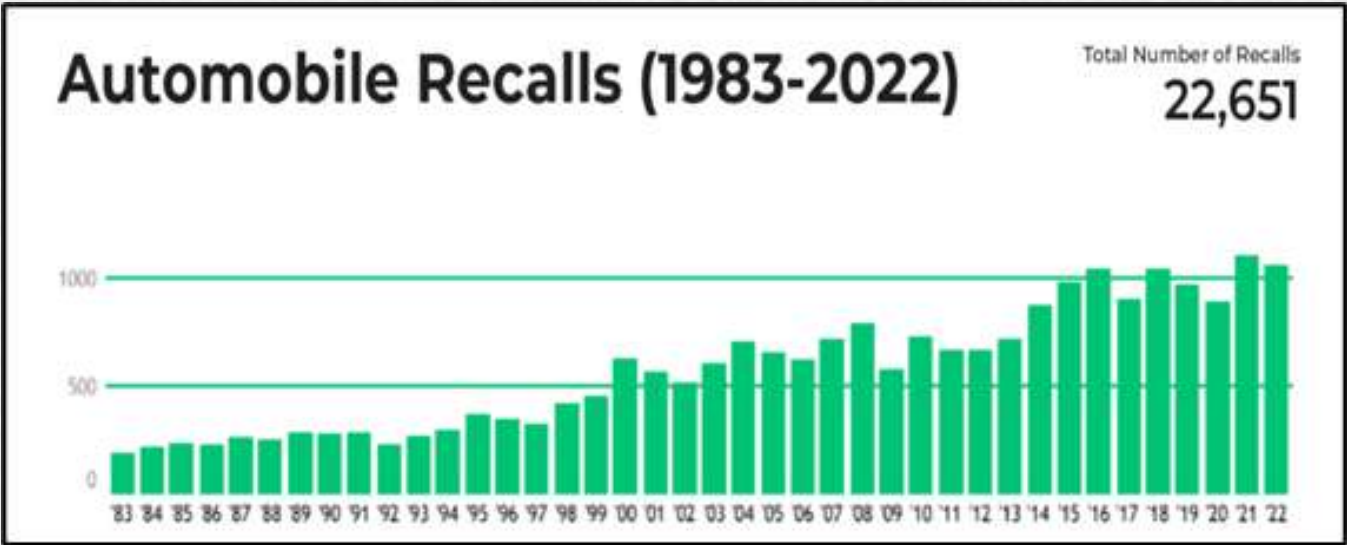


Runner Up

Jeet Shahi
PGP, IIM Lucknow



In the year 2010, Toyota had to recall 4 million vehicles with defective floor mats causing ‘unintended acceleration’. The issue, was highly publicised and the company had to bear losses worth \$7 billion in reparations, litigation fees, loss of sales etc, in addition to the ignominy faced by the firm. Similarly, it is not uncommon in the pharma industry to recall defective drugs, which, despite the recall, claim hundreds, if not thousands of lives annually. Product mishandling, and mislabelling, fraudulent transactions, contamination or adulteration, inadvertent side effects, the reasons can be multifarious, yet, these recalls expose an open wound in traditional supply chains hitherto unaddressed.



To minimise damage during product recalls, all stakeholders in the supply chain must work in swift tandem, for

which absolute transparency and trust among the supply chain partners are a prerequisite. This is where traditional supply chains fail, ensuing in a blame game in the wake of the damage done to consumers and the firm. A rigmarole of rigorous processes, manual post-verification and independent 3rd party arbitration prolong the confusion, exacerbating damage.

Global supply chains are no longer true to their nomenclature, as in, they are no longer linear chains, but a complex mesh of interdependent stakeholders. With traditional supply chains proving their insufficiency owing to disconnected data sources, information asymmetry, poor traceability and disparate motives, there is an imperative to find new ways to reconstitute the industrial supply chain.

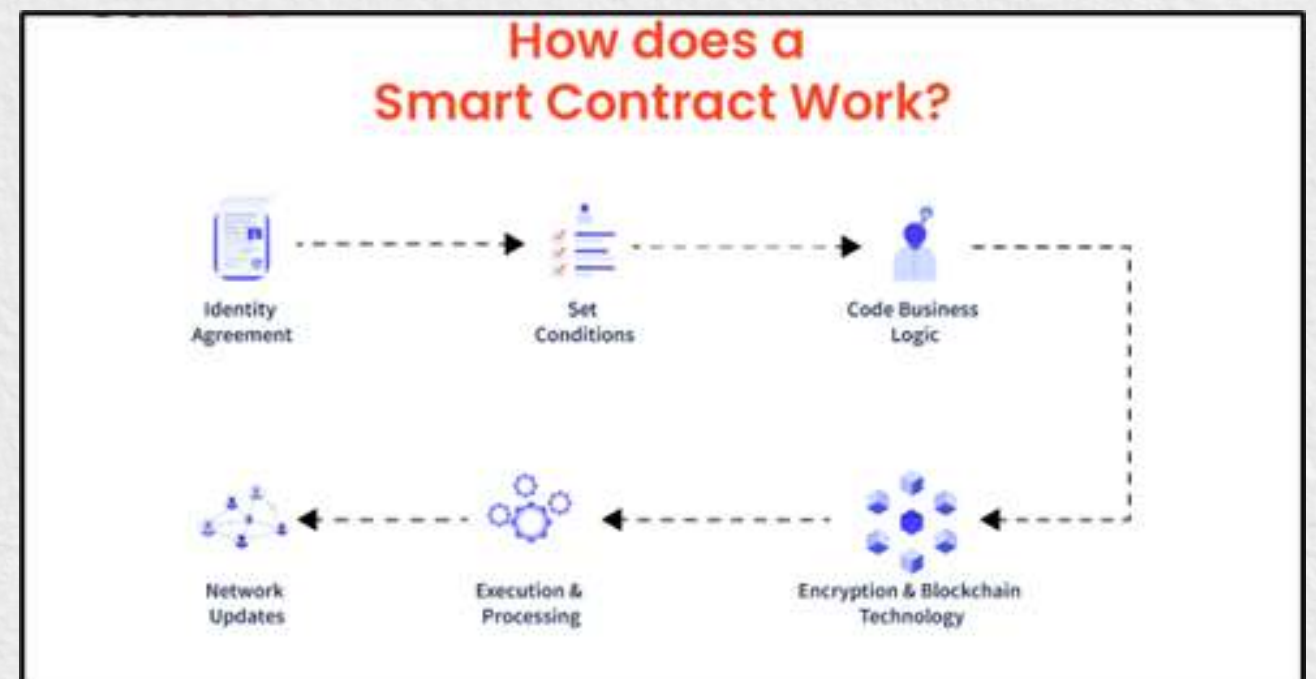
Blockchain technology, once underpinning the cryptocurrency wave that shook the financial realm, has transcended its role as the basis of a virtual currency to find utility in a multitude of domains and sectors.

Decentralised immutability, the founding tenet of blockchain, is an almost infallible method to maintain the sanctity of recorded transactions. Embedding a blockchain-based transaction system can unify the transactions made by all parties involved in the entire supply chain, promoting transparency, traceability and consequently, trust. Supply chains would no longer be subject to human error or malignancy and determining product provenance would be a boon to the end consumer.

Ushering in 'Smart Contracts', digital programs stored on blockchain networks. These are self-executing blocks of code which remove human intervention to carry out transactions. To put it simply, whenever certain predetermined conditions of a transaction are met, like delivery of specific goods, at a specified place in specific conditions, these contracts can be triggered to perform an action, like transfer a certain amount of cash, without any need of human intervention.

A novel by-product of smart contracts is the elimination of the middleman. Traditionally, most transactions require a middleman such as brokers or lawyers to enforce the contract, and invariably take a certain commission. Additionally, distrust and impugnement become inevitable. With smart contracts, the middleman becomes redundant and the entire process, trustless. Since, a

record of all the time-stamped transactions are present in all the systems in the network, it becomes impossible for any malicious party to tinker with even a modicum of data, engendering transparency, traceability and trust.



For the enlightened modern consumer, apart from price, factors like quality, origin and manufacturing conditions and processes play an important role in product consumption. Smart contracts aid in determining the provenance of the end product that reach the consumer. Consumers now can be cognisant of the sustainability, ethicality, legitimacy and transference of ownership of the product.

For the supply chain partners, anonymous or identified, the entire process becomes simplified, removing the need for manual intervention, and thus, error and forgery. With a detailed record of immutable transaction present with each party involved, one can easily trace the origin of an issue, leading to quick resolution of conflicts. For example, had Toyota implemented smart contracts, pin-pointing the vendor and batch number of the faulty floor mats would have been swift, minimising damage, improving accountability.



Let's take a real word example underlining the benefits of smart contracts.

Walmart, the de-facto global leader in supply chain management, too, could not insulate itself from the problems afflicting the transportation industry. Its vast network of distribution centres connected by a colossal fleet of trucks, becomes its strong suit as well as the chink in its armour. Delivering 500,000 shipments daily across time-zones, borders and climates is nothing short of a Herculean challenge. Walmart needs to continually ensure the integrity and punctuality of the shipments, for which there are more than 200 data points factored into each shipment invoice. These operating conditions are ripe for data discrepancies to proliferate. Corrective action, in the form of data reconciliation becomes a long and laborious process fraught with inconsistencies.

The use of multiple information systems between Walmart and the myriad carriers working in-silos was identified to be the fly in the ointment. The solution, as implemented by Walmart, was automating the entire process using

Smart Contracts and tagging the shipments with IoT sensors to relay the condition of the shipments in real time. This created a single source of truth for all parties involved. A running invoice accrues costs over time as the sensors measure the miles travelled, the temperature and location of the shipments and align it with the information reported by the carriers. The pilot project implemented to test the concept was a revolutionary success, reducing the disputed freight invoices from 70% to less than 1%. Any discrepancies in the shipments were immediately noted, and carriers didn't have to wait for weeks to get paid.

Interestingly, Walmart Canada also reaped unforeseen benefits by implementing the blockchain solution. Designed to eliminate disputes and wasted resources, the IoT enabled solution led to major operational improvements such as route optimisation by vehicle, load weight, geography and time and seamless handling of the arrival of multiple trucks at the distribution centres.

Thus, using a blockchain based IoT enabled smart contract transaction system built over its legacy infrastructure, the largest retail giant on the planet, reduced turnaround times, improved product traceability, increased process transparency and improved partner trust, all in one fell swoop.

Smart contracts are an ingenious application of blockchain technology, however, it comes with its own challenges. The computational power required to verify, approve and record the transactions on an ever-increasing network shoot up exponentially with each partner added, leading to slower processing speed and need for expensive equipment. Also, block chain technology is not a 100 percent immune to security breaches, one just needs to gain control over more than half of the peers in a network to manipulate recorded transactions on the ledger, a cybersecurity breach termed as the 51% attack. Though extremely expensive and difficult, 51% attacks are theoretically possible and do not lack historical precedent.

To make the world smaller and simple, supply chains have become a large, complex web of interdependent stakeholders. Errors, both deliberate and accidental become an inexorable consequence of such manually handled supply chains. Smart contracts disrupt the traditional supply chain by fostering transparency to document provenance, improving traceability to better respond to contingencies and elevate efficiency by removing the middleman and reducing physical documentation and verification. The pandemic having exposed several loopholes in traditional supply chain management, firms can choose to either anneal their supply chain management using technological prowess or run the risk of being reduced to mute spectators on the side lines.

References:

- <https://hedera.com/learning/smart-contracts/smart-contract-use-cases>
- https://www.researchgate.net/publication/357259412_Blockchain-Based_Solution_for_Product_Recall_Management_in_the_Automotive_Supply_Chain
- https://www.youtube.com/watch?v=pjV4_x4SG_E&t=413s
- <https://coindcx.com/blog/blockchain/smart-contracts-on-blockchain/> (Image reference)
- <https://www.blockchain-council.org/blockchain/walmart-canada-rolls-out-blockchain-network-for-freight-and-payments-management/> (Image reference)
- <https://appraisalengine.com/appraiser-blog/automobile-recalls-over-the-past-40-years-in-the-u-s/>

Future Job Market Trends in Cryptocurrency: Analysing Demand and Supply of Professionals



National Finalist

Abhishek Nath Jha

MA HRM&LR

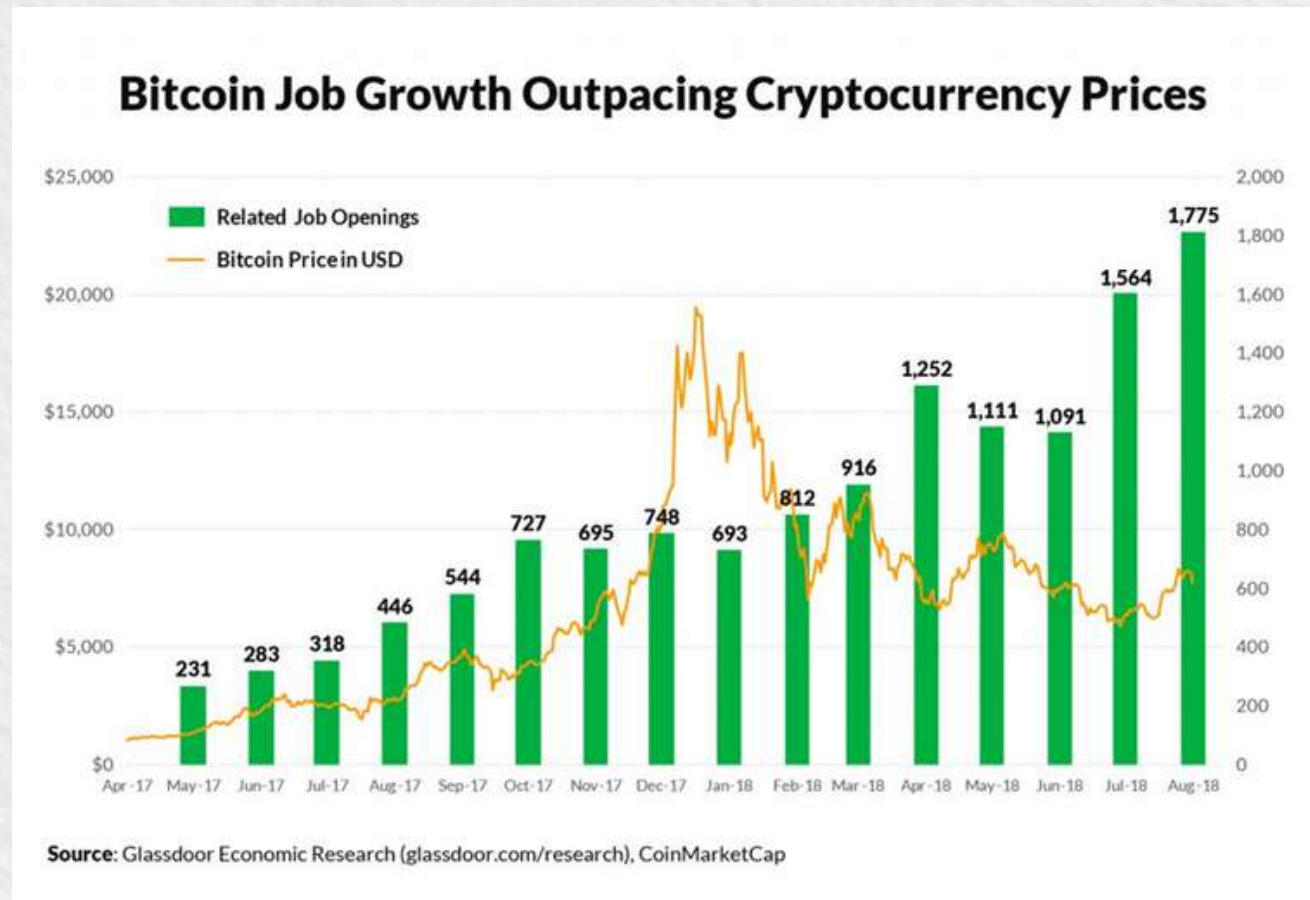
Tata Institute of Social Sciences



Introduction

The cryptocurrency industry is a whirlwind of innovation and disruption. From Bitcoin's birth in 2009 to the rise of Decentralized Finance (DeFi) and Non-Fungible Tokens (NFTs), crypto has carved a niche in the global financial landscape. As this sector matures, its impact goes beyond just financial markets; it's transforming the job market, creating exciting opportunities for a new generation of professionals. This article explores future job market trends in cryptocurrency, analysing the demand and supply of professionals in the sector and examining the broader employment impacts.

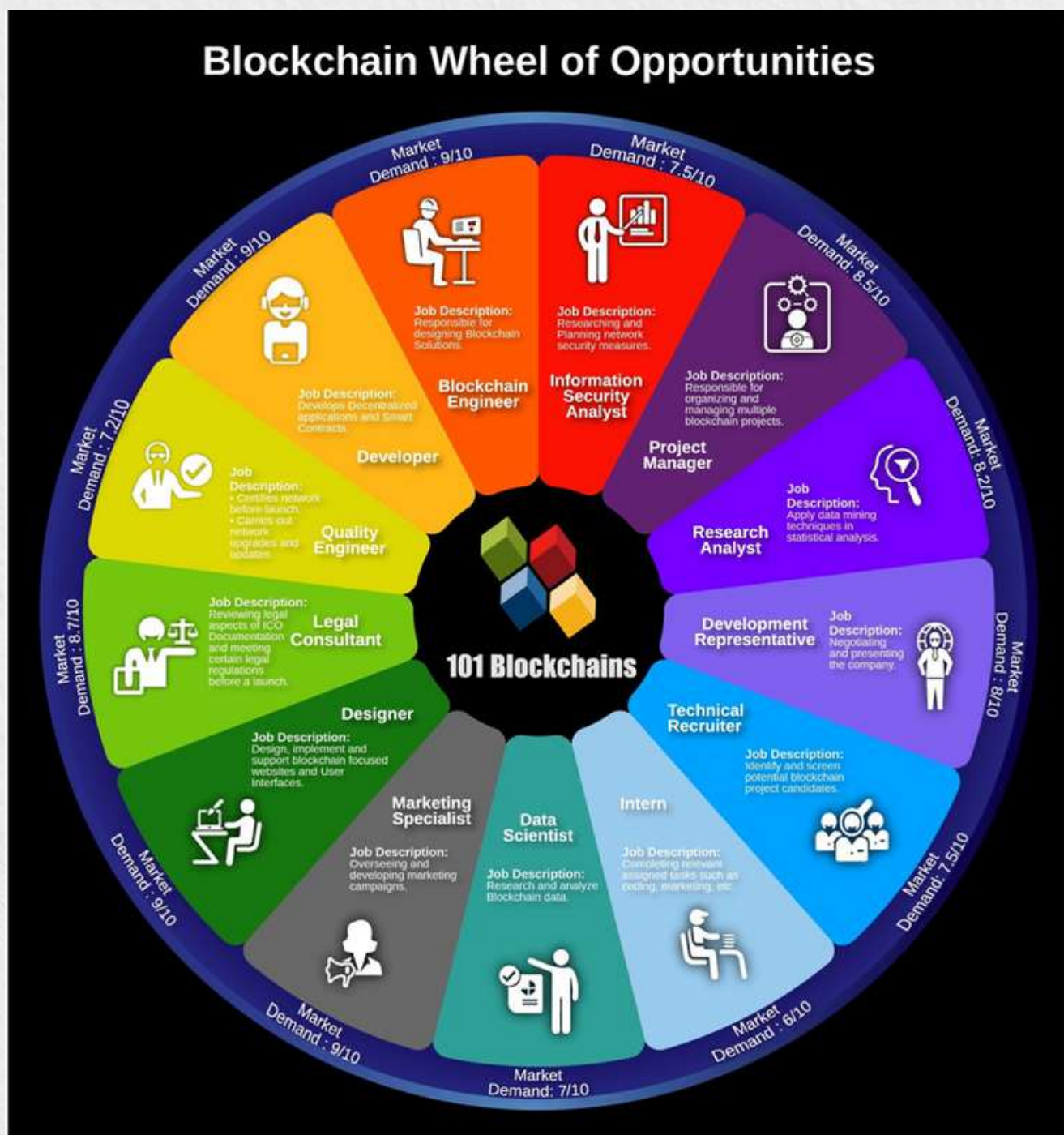
Demand on the Rise: Skills Needed in the Cryptosphere



The demand for crypto professionals is skyrocketing. According to a report by Indeed, the blockchain, cryptocurrency, and NFT industries have seen a staggering 804% growth in job postings from April 2020 to April 2022 [Source: Indeed Blockchain Jobs Report]. This trend is expected to continue as blockchain technology underpins various applications beyond cryptocurrencies.

Here's a breakdown of some of the most in-demand crypto jobs and the skillsets they require:

- **Blockchain Developers:** These are the architects of the crypto world, building and maintaining the distributed ledger systems that power cryptocurrencies and other blockchain applications. Expertise in programming languages like Solidity and experience with blockchain platforms like Ethereum are crucial [Source: CryptoJobsList - Blockchain Developer Jobs].



Source: How Blockchain Job Market is Booming! | International Search Consultants

As companies across various sectors integrate blockchain into their operations, the demand for blockchain developers and engineers has surged. LinkedIn's 2020 Emerging Jobs Report shows that blockchain developer roles have grown 33 times in the past four years.

- **Crypto Security Specialists:** With the ever-present threat of cyberattacks, crypto security specialists are vital for safeguarding digital assets. Skills in network security, cryptography, and penetration testing are highly sought after [Source: CoinMarketCap - What is a Crypto Security Specialist?].

The International Data Corporation (IDC) predicts global spending on blockchain security solutions will reach \$6.6 billion by 2023.

- **Crypto Analysts:** These market experts analyse market trends, identify investment opportunities, and research new crypto projects. Strong financial analysis skills and an understanding of blockchain technology are essential [Source: Investopedia - What Does a Crypto Analyst Do?].

According to a report by Glassdoor, job postings for cryptocurrency analysts have increased by 26% year-over-year.

- **DeFi Developers:** As DeFi applications continue to grow, developers with expertise in building decentralised financial products like lending protocols and decentralised exchanges are in high demand [Source: CoinTelegraph - DeFi Developer Jobs].
- **NFT Developers & Experts:** The rise of NFTs has created a need for developers skilled in developing and integrating NFTs into various applications. Additionally, NFT experts with knowledge of the legal and regulatory landscape surrounding NFTs are valuable assets [Source: NonFungible.com - NFT Jobs].

Supply Chain Lag: The Talent Gap in Crypto

While demand for crypto professionals is high, the supply chain needs help. Universities and institutions must incorporate comprehensive blockchain and cryptocurrency education into t

heir curriculums. This creates a talent gap that companies are actively trying to bridge.

Here are some solutions that are bridging the gap:

- Universities & Online Education Platforms: Stanford, MIT, and NYU offer blockchain technology and cryptocurrency courses. Online platforms like Coursera and Udemy provide accessible training for those seeking entry.
- Bootcamps & Training Programs: Intensive bootcamps and training programs are emerging, offering accelerated learning paths for aspiring crypto professionals [Source: Springboard - Blockchain Developer Bootcamp].
- Company Training Initiatives: Companies within the crypto space increasingly offer in-house training programs to develop talent within their workforce.
- Global Talent Pool: The decentralised nature of blockchain technology allows companies to tap into a global talent pool. Remote work has become more prevalent, enabling firms to hire professionals from diverse locations. This trend helps mitigate the talent shortage and increases competition for top talent.



Source: beincrypto.com | Crypto Jobs: Which Country Has the Most Cryptocurrency Positions?

The Impact of Crypto Growth on Employment

Job Creation

The growth of the cryptocurrency sector is expected to create many new job opportunities. A study by PwC estimates that blockchain technology could add \$1.76 trillion to the global economy by 2030, leading to significant job creation across various industries. Finance, supply chain, healthcare, and real estate sectors will likely see increased demand for blockchain and cryptocurrency professionals.

Skills Evolution

The growth of the cryptocurrency sector will not only create new job opportunities but also impact existing professions in various ways:

- Traditional Finance: As blockchain technology disrupts the financial sector, some traditional finance jobs may be replaced by automated solutions or new crypto-based alternatives. However, new opportunities in compliance,

regulation, and integrating conventional finance with DeFi will arise. For job seekers, the crypto space offers a dynamic and exciting environment.

- **Accounting & Auditing:** The rise of Individuals can position themselves to cryptocurrencies will require thrive in this rapidly evolving sector by accountants and auditors to adapt developing the necessary skillsets. The their skills to handle digital assets future of work will undoubtedly be and blockchain-based transactions. shaped by innovation, and the
- **Law & Regulation:** As governments cryptocurrency industry is at the grapple with regulating the crypto forefront of this change. space, a demand for lawyers

References:

- specialising in blockchain technology and cryptocurrency regulations will rise. ·LinkedIn. (2020). 2020 Emerging Jobs Report. Retrieved from [LinkedIn](#)
- **Customer Service:** The growing number of cryptocurrency users will necessitate a robust customer service infrastructure. This will create jobs for professionals who can assist users with navigating crypto wallets and exchanges and troubleshooting technical issues. ·Glassdoor. (2021). Cryptocurrency Analyst Job Postings. Retrieved from [Glassdoor](#)
- IDC. (2020). Worldwide Blockchain Spending Guide. Retrieved from [IDC](#)
- CoinDesk Research. (2023). Crypto Hubs 2023 Report.
- Stanford University. (2021). Blockchain and Cryptocurrency Courses. Retrieved from [Stanford University](#)

Inclusivity and Diversity

The decentralised and global nature of dollar reasons to rethink blockchain. the cryptocurrency industry promotes inclusivity and diversity. It provides opportunities for individuals from underrepresented groups to participate and thrive in the digital economy. Remote work and flexible job structures further enhance accessibility.

Conclusion: A Future Shaped by Innovation

The future job market in cryptocurrency is brimming with potential. While the demand for skilled professionals is high, there's a need to bridge the talent gap through education and training initiatives.

- PwC. (2020). Time for trust: The trillion-dollar reasons to rethink blockchain. Retrieved from [PwC](#)
- "Regulatory Developments in Cryptocurrency". (2023). The Wall Street Journal. Retrieved from WSJ.
- "Educational Programs in Blockchain Technology". (2023). MIT Technology Review. Retrieved from MIT Review.
- "Job Creation in the Cryptocurrency Sector". (2023). LinkedIn. Retrieved from [LinkedIn Report](#).

- "Decentralized Finance (DeFi) and Job Growth". (2023). CoinTelegraph. Retrieved from CoinTelegraph.
- "Regulatory Uncertainty in Cryptocurrency". (2023). The Wall Street Journal. Retrieved from WSJ.

Global Vs India Crypto Adoption



National Finalist

Yashwanth Vaddepally

MBA

Great lake great learning institute

Cryptocurrency popularity has skyrocketed around the world, inspired by its potential to transform the financial system by enabling decentralized, transparent, and borderless transactions. However, the rate and character of adoption differ substantially by region. Comparing global trends to the specific situation in India reveals both relationships and differences.

Global Crypto Adoption

Globally, the adoption of cryptocurrencies has been robust, marked by increasing acceptance from both individual investors and institutional players. Several factors contribute to this trend:

1.Financial Inclusion: Cryptocurrencies provide financial services to the unbanked, especially in developing nations. According to a World Bank report from 2021, over 1.7 billion people worldwide are unbanked, and cryptocurrencies can create an alternative financial system accessible by smartphone and internet connection.

2.Investment Appeal: Cryptocurrencies, notably Bitcoin, are known as 'digital gold.' Bitcoin's market value exceeded \$1 trillion by 2023, demonstrating its importance as an asset class. Institutional investors, including hedge funds and public firms, have dedicated some of their holdings to cryptocurrencies.

3.Technological Innovation: The underlying blockchain technology is being investigated for applications outside banking. According to Gartner, blockchain will have an annual business value of more than \$3 trillion by 2030. This has led to tremendous investment in the cryptocurrency field.

4.Regulatory Clarity: In a number of well-established markets, regulatory frameworks have developed to create a clearer legal environment for cryptocurrency. For example, the United States has developed laws through the Securities and Exchange Commission (SEC) and the Commodity Futures Trading Commission (CFTC)

that, while tough, give a level of user growth and engagement. assurance that encourages adoption. Platforms like as Wazir, Coin DCX, and Zeb Pay claim millions of users.

5.Mainstream Acceptance: Major corporations, such as Tesla and PayPal, 3.Technological and Entrepreneurial have begun to accept cryptocurrency as Spirit: India's robust technology industry a payment option. PayPal's support of and entrepreneurial spirit have resulted Bitcoin, Ethereum, Litecoin, and Bitcoin in a thriving ecosystem for blockchain Cash for transactions marks a significant startups. According to the Nasscom-shift toward mainstream usage. Despite Avasant India Blockchain Report 2020, these promising tendencies, worldwide over 100 blockchain businesses are cryptocurrency adoption confronts functioning in India, with applications difficulties. Many regions continue to ranging from financial services to supply experience regulatory ambiguity, chain solutions. cybersecurity threats abound, and the 4.Government Stance: The Indian volatility of cryptocurrencies might deter government has taken a cautious some investors and consumers. approach to cryptocurrencies. While it has indicated an interest in blockchain technology, it is sceptical of

India's Crypto Adoption

India's cryptocurrency journey has been cryptocurrencies due to worries about complicated, characterized by legislative financial stability, money laundering, uncertainty, public curiosity, and and consumer protection. The proposed technological potential. Several Cryptocurrency and Regulation of elements characterize the Official Digital Currency Bill has been a cryptocurrency landscape in India: source of dispute, as it intends to

1.Regulatory Environment: The prohibit private cryptocurrencies while regulatory landscape in India has been pushing the use of blockchain unpredictable and frequently restrictive. technology and proposing the In 2018, the Reserve Bank of India (RBI) introduction of a central bank digital prohibited banks from interacting with currency (CBDC).

cryptocurrency transactions, stifling 5.Financial Inclusion and Remittances: growth. However, the Supreme Court Cryptocurrencies have the potential to lifted the restriction in 2020, resulting in improve financial inclusion in India, a comeback in cryptocurrency activities. where a large proportion of the population is underbanked. In addition,

2.Public Interest and Adoption: Despite India is one of the world's major regulatory difficulties, cryptocurrency is recipients of remittances, at \$87 billion popular in India. Chainalysis' 2022 poll in 2021. Cryptocurrencies could provide rated India second in the Global Crypto a faster, less expensive alternative to Adoption Index, suggesting significant established transfer systems.

Comparative Analysis.

When comparing worldwide and Indian internationally and in India, blockchain crypto usage, numerous significant technology is being investigated for differences and similarities emerge greater applicability. However, India's

1.Regulatory Frameworks: While global robust IT sector offers a distinct markets have shifted toward clearer and advantage, possibly putting the country more supportive regulatory frameworks, as a leader in blockchain innovation if India's regulatory environment is still in legislative impediments are successfully flux. In comparison to other countries, overcome.

India's adoption rate has slowed due to Conclusion uncertainties.

2.Market Maturity: The cryptocurrency offers an intriguing contrast between market in many developed countries is global trends and the Indian setting. more mature, with greater institutional Globally, we are seeing a shift toward engagement and improved popular adoption and incorporation of infrastructure. In comparison, the Indian cryptocurrencies into the financial market is still in its early stages, with system, fuelled by clear regulatory increasing but relatively small market frameworks, technological capitalization and trade volume. breakthroughs, and increased institutional involvement.

3. Use Cases: Cryptocurrencies are used In India, the path to cryptocurrency globally for a variety of purposes, adoption has been more difficult, with including investing and payment legislative hurdles and strong public methods. In India, the key use case has interest. Cryptocurrencies have been investing, spurred by the younger enormous potential to boost financial generations in digital assets. However, inclusion and revolutionize the the potential for additional use cases, remittance landscape in India, but such as remittances and financial realizing this potential is strongly inclusion, is substantial. dependent on the legal framework.

4.Public Perception: Cryptocurrencies are gaining popularity around the world, If India can create a supportive and thanks to endorsements from large transparent legislative environment, it companies and more media attention. may use its technological prowess and In India, the public's perception is mixed. huge, young population to become a While there is enthusiasm among major player in the global bitcoin younger people and tech-savvy persons, industry. Both worldwide and in India, mistrust remains due to regulatory the future of cryptocurrencies is fraught uncertainties and a lack of with opportunities and challenges. The understanding among the general way these are navigated will shape the public future financial landscape.

Sources

1. World Bank. "The Global Findex Database 2021."
<https://www.worldbank.org/en/publication/globalindex>).
2. CoinMarketCap. "Bitcoin Market Capitalization."
(<https://coinmarketcap.com/>).
3. Gartner. "Predicts 2021: Blockchain Innovation."(<https://www.gartner.com/en/doc/123456>).
4. PayPal Newsroom. "PayPal Launches Crypto Services."
(<https://newsroom.paypal-corp.com/2021-10-21>).
5. Supreme Court of India. "RBI vs. Internet and Mobile Association of India."
(<https://www.supremecourtindia.nic.in/>).
6. Chainalysis. "2022 Global Crypto Adoption Index."(<https://www.chainalysis.com/reports/2022-global-crypto-adoption-index/>).
7. NASSCOM. "India Blockchain Report 2020." (<https://nasscom.in/blockchain-report-2020>).
8. Indian Government. "Cryptocurrency and Regulation of Official Digital Currency Bill."(<https://www.indiagov.in/legislation/crypto-bill>).

Cryptocurrency and HR: Navigating Regulations, Talent, and Technology in India



National Finalist

Kota Sweta

MBA

IIM Lucknow

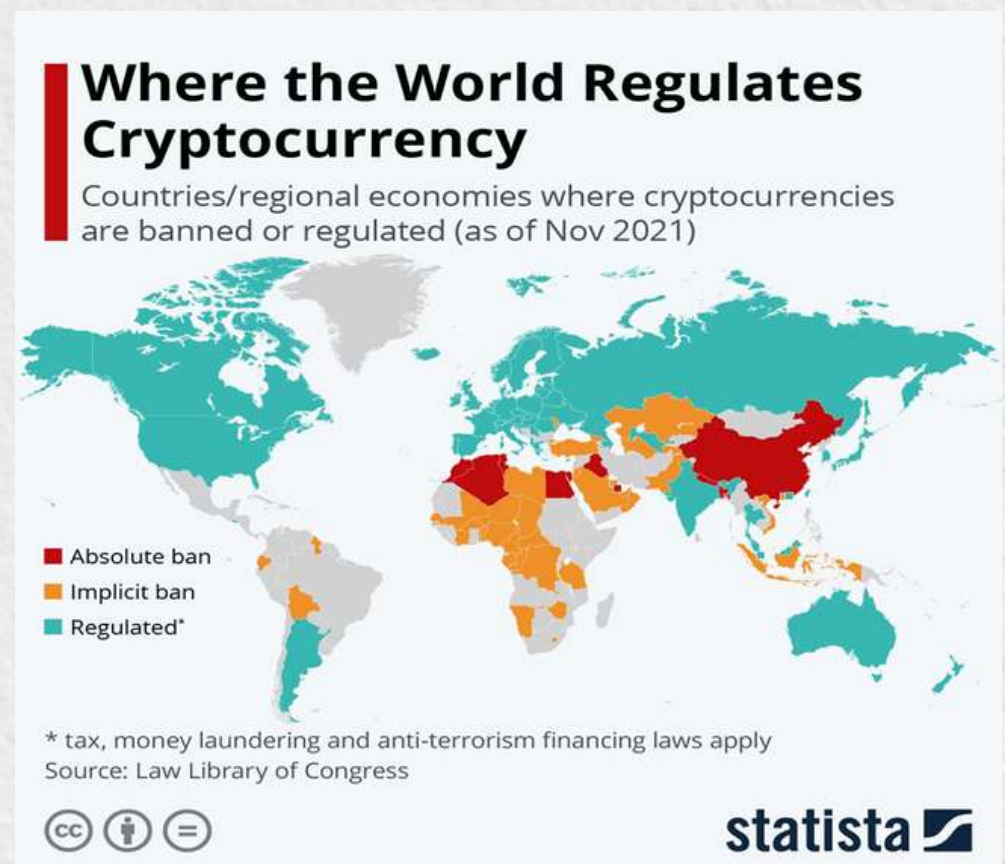


The cryptocurrency sector in India is at a critical juncture, facing regulatory challenges while also presenting immense opportunities for employment and technological innovation. This article examines the current landscape of cryptocurrency in India from an HR perspective, exploring regulatory impacts, talent mobility, future job market trends, and potential blockchain applications in HR management.

Ethics and Compliance: Regulatory Impact on Cryptocurrency Employment

India's cryptocurrency regulations have undergone significant changes in recent years, creating a complex environment for businesses and professionals in the sector. The Reserve Bank of India (RBI) initially banned banks from dealing with crypto-related businesses in 2018, but this was overturned by the Supreme Court in 2020. However, uncertainty remains as the government continues to develop a comprehensive regulatory framework.

Compared to other nations, India's approach has been relatively cautious. Countries like Singapore and Switzerland have established clear

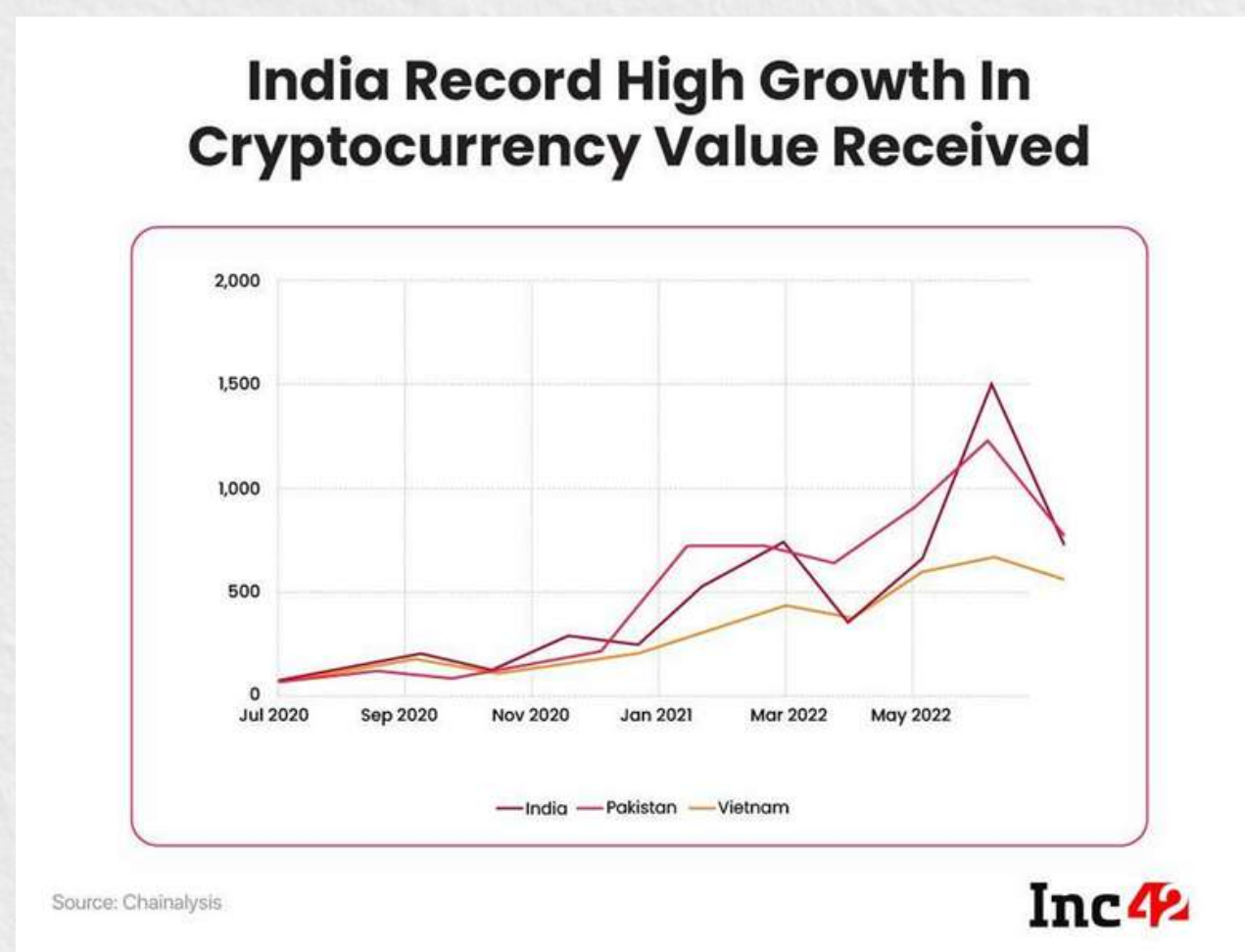
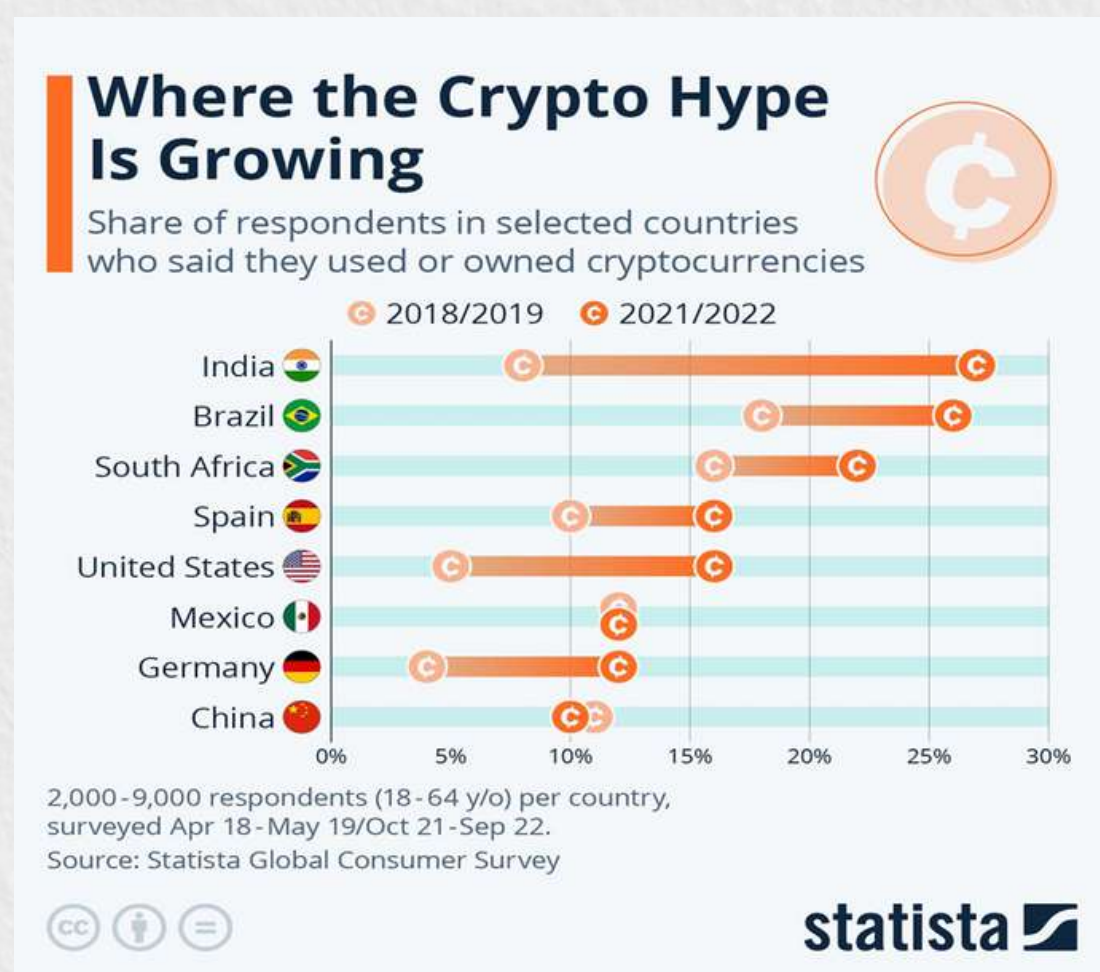


regulatory frameworks that encourage innovation while protecting investors. The United States has taken a more fragmented approach, with different agencies providing varying levels of guidance.

To improve its regulatory stance, India could consider:

1. Establishing a clear legal definition of cryptocurrencies
2. Creating a licensing system for cryptocurrency exchanges
3. Implementing investor protection measures
4. Developing guidelines for taxation of cryptocurrency transactions

These improvements could provide greater stability for the sector and potentially increase employment opportunities.



Talent Mobility: Cryptocurrency Future Job Market Trends in Professionals in India and Abroad

The uncertain regulatory environment has led to a significant brain drain in India's cryptocurrency sector. Many skilled professionals have moved to more crypto-friendly jurisdictions like Singapore, Dubai, and Switzerland. This outflow of talent poses challenges for India's ability to compete in the global cryptocurrency market.

Despite regulatory challenges, the cryptocurrency sector in India shows potential for significant job creation. As of 2021, it was estimated that the Indian crypto industry employed around 50,000 professionals. With growing adoption and potential regulatory clarity, this number could increase substantially.

While exact figures are difficult to obtain due to the rapidly evolving nature of the industry, estimates suggest that India has around 15-20 million cryptocurrency investors. In comparison, the United States has approximately 46 million crypto owners, while Nigeria leads globally with 33% of its population owning cryptocurrencies.

To address talent mobility issues, India could:

1. Provide clarity on the legal status of cryptocurrency jobs
2. Offer incentives for cryptocurrency startups to establish operations in India

employment, potentially creating hundreds of thousands of jobs in the coming years.

To prepare for this potential growth, India's education system and workforce development programs should focus on developing skills in blockchain technology, cryptography, and financial technologies.

3. Promote education and training programs in blockchain and cryptocurrency technologies

Blockchain Technology for HR leader in this emerging field.

Management

As the sector evolves, HR professionals

Beyond cryptocurrencies, blockchain will play a crucial role in navigating the technology offers several promising changing landscape, from ensuring applications for HR management: compliance with evolving regulations to

leveraging blockchain technology for

improved HR processes. The future of

cryptocurrency in India is uncertain, but

with the right approach, it could

become a major driver of economic

growth and employment in the years to

come.

1. Recruitment: Blockchain can create immutable records of candidates' qualifications and work history, streamlining the verification process and reducing fraud.

2. Payroll: Cryptocurrency-based payroll systems could enable faster, cheaper international payments, particularly beneficial for companies with a global workforce.

3. Employee Verification: Blockchain-based identity management systems could simplify background checks and enhance privacy protection.

4. Performance Management: Smart contracts could automate performance-based incentives, ensuring transparent and timely rewards.

Implementation of these technologies could significantly improve HR processes, though it would require careful consideration of data privacy laws and employee rights.

Conclusion

The cryptocurrency sector in India stands at a crossroads, with regulatory challenges balancing against significant potential for innovation and job creation. By developing a clear, supportive regulatory framework and investing in education and workforce development, India could position itself as a global

BLAZE 3.0 PAN-INDIA OPERATIONS & SUPPLY CHAIN SIMULATION COMPETITION IIM KASHIPUR



Manish Wayangankar

1.First of all, congratulations on winning. How do you feel about it?

Winning the Ops-Blaze 3.0 competition is an exhilarating moment for me. Competing against 400+ teams from prestigious institutions like IIMs and IITs is no easy feat. It's a validation of my skills in operations domain. I'm proud of the hard work and strategic thinking that led to this achievement, and it boosts my confidence in tackling future challenges.

2.Could you brief us about this competition? What were the hurdles you faced and how did you overcome them?

One of the main challenges was the intense pressure during the simulation round. The case study demanded quick decision-making and balancing multiple variables such as logistics, turnaround time, and client needs. Time management was crucial since I had to analyze the case and implement solutions within just one hour. Competing against highly skilled teams also added to the challenge.

3.Competing in such high level competitions requires an edge over others. What steps did you take to distinguish yourself from other participants?

I committed myself to thorough and detailed preparation, making it a priority to stay well-informed about the latest trends, industry updates, and emerging practices. To strengthen my problem-solving abilities, I engaged in numerous simulations, each one

designed to refine my approach, enhance my critical thinking, and improve my efficiency under pressure. By incorporating a structured and analytical methodology, I ensured that I could assess the situation from multiple angles, identify key issues, and devise effective strategies. This comprehensive preparation allowed me to approach the case study with confidence, working swiftly yet methodically to deliver solutions that were both impactful and well-rounded.

4.What were your key learnings and takeaways?

I gained a deep appreciation for the importance of holistic thinking, recognizing the need to approach challenges from multiple perspectives to uncover well-rounded solutions. I learned to make agile decisions in dynamic and often unpredictable situations, adapting quickly to new information and shifting priorities. Equally significant was the realization of how collaboration and competition work hand in hand to refine my skills—collaboration fostering teamwork and shared growth, while competition driving me to push my boundaries and strive for excellence. Together, these experiences shaped my ability to think strategically and act decisively in complex environments.

5.It's always difficult managing time between academics, personal life, and other opportunities. How did you manage your time?

Time management has been a consistent challenge. I maintain a strict schedule and prioritize tasks based on deadlines and importance. Focusing on key academic deliverables early in the trimester helped me carve out time for various competitions. Regular self-assessment and discipline have been key to maintaining balance. I am actively participate in various events which feels like routine now.

6.What guidance or recommendations would you offer to fellow students to ace such high value platform?

Keep yourself updated with industry trends and recent advancements in your field of specialization. Engage in case studies, simulations, and role-playing exercises to practice quick, strategic decision-making. Don't shy away from teamwork and learning from peers. Each individual brings a unique perspective. Competitions often throw unexpected challenges at you. Developing the skill to stay calm and think on your feet is critical to success.



TEAM SAMVAD

EDITORIAL TEAM



Sakshi Rawat
Co-Editor



Pinak Dusane
Chief Editor



Shrutee Das
Co-Editor

CONTENT CURATORS



Aayush Singh
Head Curator



Sonali Shrimali
Deputy Curator



Julian Ma
Content Curator



Priyal Sharma
Content Curator



Mehak Khandelwal
Content Curator



Parth Vora
Head



Shruti Jain
Deputy Head



Sai Kumar
Member



Yasaswitha Srujana
Member

CREATIVE MINDS

PR PROS



Piyush Kumar
Head



Anushka
Deputy Head



Yash Durge
Member



Bhumika Karnani
Member



Trisha Bharadwaj
Head



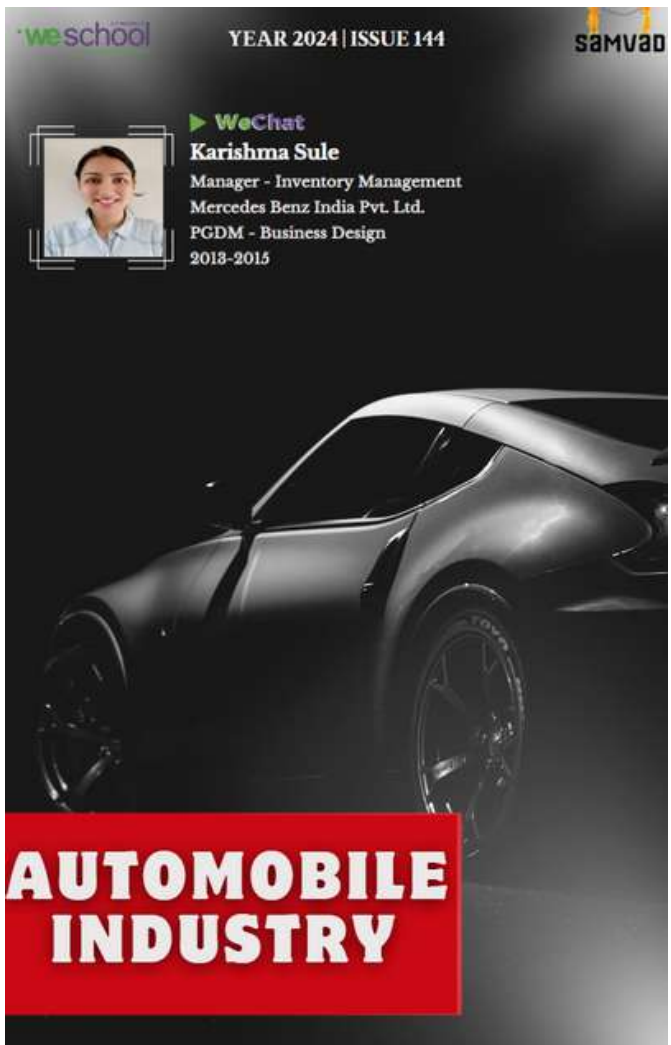
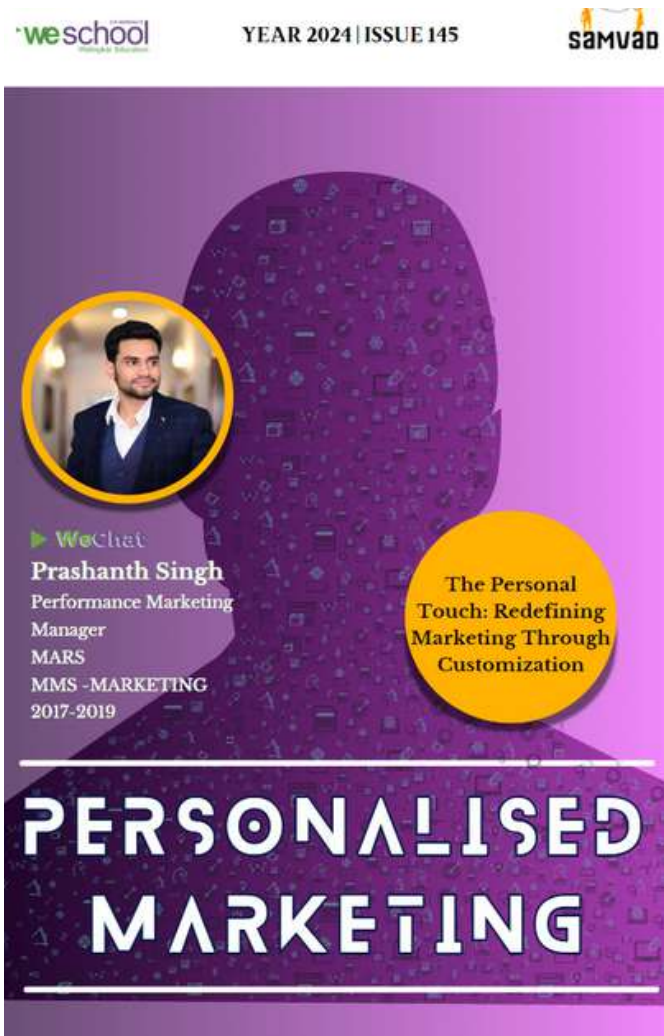
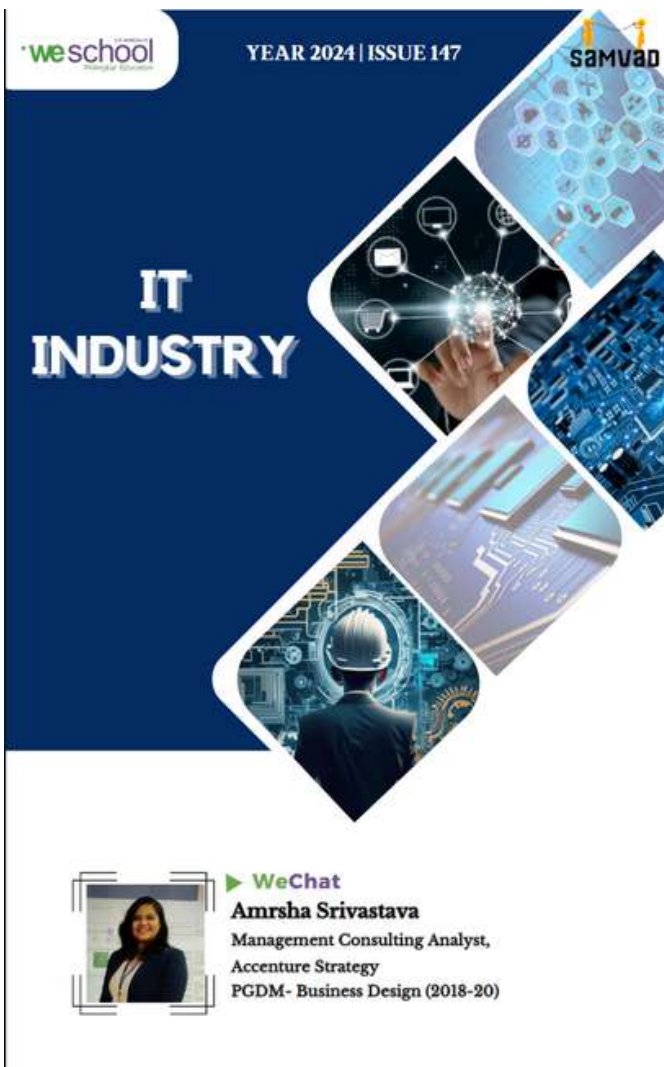
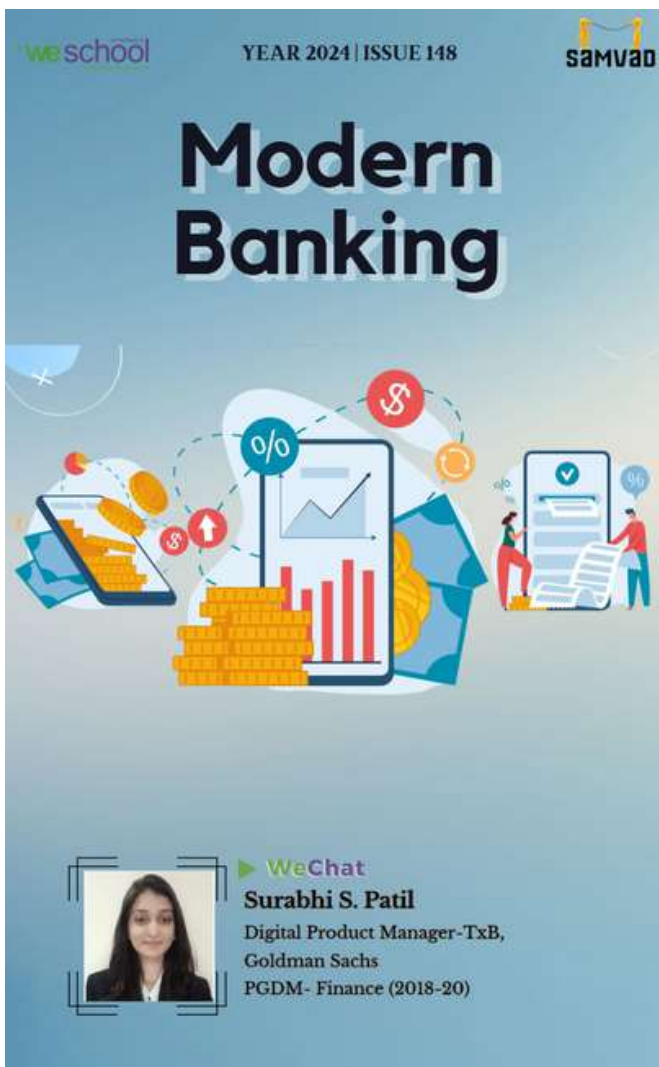
Prince Shrivastava
Member



Bhavesh Jain
Member

WECHAT MASTERS

PREVIOUS MAGAZINES





Follow us on



@samvad.weschool



Samvad WeSchool



SamvadWE



@samvad_we

Contact Us: samvad.we@gmail.com