



An Analysis of Crypto Currency in Madhya Pradesh with a Special Reference on Bitcoin

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ABSTRACT:

This study presents a detailed analysis of cryptocurrency adaptation and awareness in Madhya Pradesh, with a special reference to Bitcoin. The research surveyed 50 individuals across major cities, including Bhopal, Indore, and Gwalior, to understand their investment behaviour, awareness levels, and future interest in cryptocurrencies. Of the total respondents, 38 individuals (76%) were aware of cryptocurrencies, and 16 (32%) had invested in them. Bhopal led with the highest number of investors (56.25%), followed by Indore (25%) and Gwalior (18.75%). In terms of profession, self-employed individuals represented the largest investor group (50%), predominantly from Bhopal. Business professionals (31.25%) and private sector employees (18.75%) also showed significant involvement. The age group of 31-40 years constituted the majority (62.5%) of investors, with annual incomes ranging from ₹5 lakhs to ₹20 lakhs. Bitcoin and Ethereum were the most popular cryptocurrencies, with 68.75% and 75% of investors holding them, respectively. Regarding future investment interest, 68.75% of current investors expressed plans to continue investing, with the majority being self-employed. Conversely, 31.25% of participants were reluctant to invest further due to legal uncertainties, particularly among government employees. Awareness about cryptocurrency's potential market risks was notable, with mixed opinions on whether the market would experience a "bubble burst." Among those willing to invest, 36.36% believed in the possibility of such an event, while 50% disagreed. This analysis provides critical insights into the current status of cryptocurrency adoption in Madhya Pradesh and highlights the significant role of Bitcoin within this evolving landscape.

KEYWORDS: *Cryptocurrency, Bitcoin, Blockchain, Cryptography, MP*

INTRODUCTION:

Cryptocurrency, a digital currency leveraging blockchain technology and cryptography, is reshaping the financial sector by offering enhanced transparency, security, and efficiency through decentralized networks. Despite its global impact, cryptocurrency remains an emerging concept in India, with a limited academic exploration of its implications, adoption, and future potential. Since the creation of Bitcoin by the pseudonymous Satoshi Nakamoto in 2009, the cryptocurrency market has expanded significantly, with over 13,217 cryptocurrencies and a market capitalization exceeding \$1.32 trillion as of June 2024.

In India, the government officially recognized cryptocurrencies as virtual digital assets in the 2022 budget. Finance Minister Nirmala Sitharaman announced that cryptocurrency trading would be taxed at 30% (plus a 4% surcharge) under Section 115BBH, with a 1% tax deducted at source (TDS) on transfers exceeding specified thresholds under Section 194S. This tax applies equally to long-term and short-term gains and affects all types of income earned from cryptocurrency investments.

This study examines cryptocurrency awareness and adoption behaviour in Bhopal, Indore, and Gwalior, focusing on Bitcoin and other major cryptocurrencies. The total population of Madhya Pradesh is 72,626,809, spread across 55 districts. From these, we have selected three key districts for analysis. Bhopal, the capital city and administrative headquarters of both the Bhopal district and division, has a population of 1,883,381. Indore, the commercial hub of Madhya Pradesh, has the largest population at 2,167,447. Gwalior, a counter-magnet city, has a population of 1,101,981. Cryptocurrency, particularly Bitcoin, has gained significant global attention, and its adoption in India has been notable despite regulatory ambiguities. Madhya Pradesh, with its diverse demographic and economic landscape, offers a compelling case for analyzing awareness, adaptation, and investment trends in cryptocurrency. This paper examines the penetration of cryptocurrency, especially Bitcoin, within the cities of Bhopal, Indore, and Gwalior, alongside an assessment of the professional and age groups driving its growing popularity.

In a sample of 50 people, 32% have invested in cryptocurrency, while 76% are aware of it. Among the 16 investors, Bhopal leads with 56.25%, followed by Indore at 25%, and Gwalior at 18.75%. Most investors are self-employed (50%), with 31.25% representing the business community. Notably, no homemakers or students have invested in cryptocurrency, indicating a professional bias in its adoption. Age-wise, most investors (62.5%) are between 31-40 years old, with varying annual income levels and trading experience.

Bitcoin is the most popular cryptocurrency, held by 68.75% of investors, followed by Ethereum (75%) and Ripple (37.5%). Despite growing interest, 31.25% of individuals are reluctant to invest, primarily due to concerns about legality, particularly among government employees. However, 68.75% of current investors are interested in future investments.

The awareness landscape shows that 44% of those aware are willing to invest, though opinions vary on the speculative nature of cryptocurrency markets. The perception of a potential 'bubble burst' has deterred some from investing, with 36.36% of those willing to invest believing such a scenario is possible.

Challenges & issues

- **Security threats: Security Threats:** Hackers and malicious users pose significant risks to virtual currencies. If they manage to breach the system and understand how virtual currencies are created, they could potentially generate fake currency or manipulate account balances to steal funds. For example, selling in-game virtual items and currency is against the policies of the game *World of Warcraft* (WoW). However, many users turn to WoW gold-selling websites to purchase virtual gold to pay for in-game items. Unfortunately, many of these websites are unreliable and vulnerable to hacking, leading to complaints from users who have paid real money but received nothing or fake virtual currency in return.
- **Collapse Concerns in Cryptocurrency Systems:** The unlimited issuance of virtual currencies within various virtual communities can lead to economic problems, as the supply is not regulated by demand. For instance, providers like Second Life could issue an endless supply of Linden Dollars, raising the prices of virtual items to increase real-world revenue. However, this practice could result in inflation and economic instability, potentially leading to the collapse of the virtual currency system.
- **Impact on Real Monetary Systems:** Virtual currencies connected to real-world monetary systems can affect actual money demand and supply. For example, platforms that allow purchases with virtual currency may reduce reliance on real money. Conversely, platforms that enable virtual-to-real currency exchanges can increase demand for real money. These fluctuations can impact real monetary systems.
- **Gold Farming Risks:** Gold farming, a prevalent practice in China and other developing countries, involves players who earn in-game currency, such as gold in *World of Warcraft*, and sell it for real money. These players, known as gold farmers, target buyers who lack the time to accumulate virtual currency themselves. This process generates significant cash flow but operates outside regulated environments. Consequently, gold farming increases the risk of fraud and financial instability due to the unregulated exchange of virtual currency for real money.
- **Money Laundering:** Money laundering is a significant risk associated with virtual currencies, particularly on platforms that allow users to exchange virtual currency for real money. A notable case occurred in Korea in 2008, where police arrested a group of 14 individuals for laundering \$38 million derived from the sale of virtual currency. The group transferred the \$38 million, obtained through gold farming, from Korea to a shell company in China as payments for purchases.
- **Black Market for Cryptocurrency:** Black Market for Cryptocurrency: As online games such as *Second Life* and *World of Warcraft* have evolved, a black market for trading virtual currencies has developed. The increasing use of virtual currencies in these online environments has contributed to the growth of this illicit market. Discussions on various gaming forums indicate numerous instances of fraud. For example, when players leave a game, they might attempt to sell their virtual currency on game forums. This method of transaction poses significant risks, as fraudulent users may either fail to make the payment or challenge it after the funds have been transferred. Consequently, sellers face the risk of losing both their money and their virtual currency.

Working mechanism of cryptocurrency

Cryptocurrency operates on blockchain technology, which functions as a digital ledger recording transactions. When a transaction is initiated, it is distributed simultaneously across multiple computers within the network. This decentralized system ensures that no single entity, unlike traditional currencies managed by central banks or governments, controls the transactions. The verification process, known as crypto mining, is conducted by individuals called miners. Once verified, the funds are transferred to the recipient's wallet, completing the transaction.

The Cryptocurrency market

Data was collected from an online survey questionnaire, where participants indicated which cryptocurrencies they are investing in and the total number of coins they are investing in within Uttar Pradesh. As of March 2024, there are around 13,217 cryptocurrencies in existence, though not all are active or hold value. After excluding numerous "dead" cryptocurrencies, approximately 8,985 active coins remain. The collective market capitalization of all cryptocurrencies stands at roughly \$1.32 trillion, with a daily trading volume of \$172 billion. Bitcoin leads with the highest market capitalization, around \$1.20 trillion, nearly triple that of its nearest competitor, Ethereum. Among the top 10 cryptocurrencies, both Tether and USDC are pegged directly to the USD.

Approximately 8% of the U.S. population engages in cryptocurrency trading. Asia, the most populous continent, boasts over four times the number of cryptocurrency users compared to any other region.

Name	Price	Market cap
Bitcoin	\$60,873	\$1.20T
Ethereum	\$2633.62	\$317.44B
Ripple	\$0.60	\$33.76B
Litecoin	\$63.44	\$4.74B
Bitcoin cash	\$347.82	\$6.88B

Table 1: All the figure accurate as of March 2024 and **Source:** Forbes.com

OBJECTIVES

- To explore the awareness and adaptability of Cryptocurrency in MP
- To analyse the future of cryptocurrency in Madhya Pradesh.
- To study the regulatory stands of the Government of India on cryptocurrency.

SCOPE OF STUDY:

The scope of this study is to examine the awareness and adoption of cryptocurrencies in Madhya Pradesh, focusing on the key cities of Bhopal, Indore, and Gwalior. These cities were chosen due to their demographic significance. According to the 2011 Census, Bhopal's population is 1,798,218. Bhopal is a metropolitan and the capital city of Madhya Pradesh. Indore, with a population of 3,276,697, is the most populous city in the state and is known for being the cleanest city in India; it also serves as the administrative capital. Gwalior, with a population of 2,032,036, surpasses Bhopal in terms of population. This research investigates how various segments of the population in Bhopal, Indore, and Gwalior engage with cryptocurrencies, analysing patterns across demographic factors such as age, occupation, annual income, and investment behaviour. The study will include a detailed investigation into how many residents in these cities invest in cryptocurrencies, identifying the most preferred types of cryptocurrencies, the platforms used for transactions, and the average amount being invested. Furthermore, in light of governmental regulations, the study will explore the underlying motivations behind cryptocurrency adoption. The findings from this research will contribute to a deeper understanding of the cryptocurrency ecosystem in Madhya Pradesh.

RESEARCH METHODOLOGY

1. Research design

The research will utilize a mixed-methods approach, integrating both qualitative and quantitative research methods to analyse cryptocurrency adoption and usage in the selected cities thoroughly. An exploratory phase will initially identify the key factors influencing cryptocurrency awareness and adoption in Bhopal, Indore, and Gwalior laying the groundwork for a more targeted investigation. The study aims to capture and describe the prevailing trends, patterns, and behaviours related to cryptocurrency in these cities, offering a detailed overview of the current landscape.

2. Data collection

The research will employ both primary and secondary data collection methods. Primary data will be collected through an online survey using a structured questionnaire targeting participants from Bhopal, Indore, and Gwalior. The survey will cover various demographic groups, including students, private sector employees, homemakers, and service workers. Topics such as age, occupation, cryptocurrency investments, future outlook on cryptocurrency, income levels, and other relevant factors will be addressed. Secondary data will be gathered through a comprehensive review of existing literature, including websites, articles, and other referenced materials.

3. Sampling

The target population comprises residents of Bhopal, Indore, and Gwalior. A sample of approximately 50 respondents from these cities will be selected for the survey, ensuring diverse representation across age groups, occupations, and economic statuses. Stratified random sampling will be employed to ensure adequate representation of different population segments.

DISCUSSION

In February 2024, a pilot study was conducted to gather data on cryptocurrency usage in Uttar Pradesh, focusing in Bhopal, Indore, Gwalior. The primary objective was to assess cryptocurrency adoption and provide actionable insights. The study examined factors such as the types of cryptocurrencies used,

participants' demographics (age, profession, coins, annual income), investment behaviour before and after entering the cryptocurrency market, trading history, styles, holding periods, cryptocurrency usage, platforms used, and investment amounts. It also evaluated participants' confidence in managing cryptocurrencies in India's partially regulated environment and their outlook on digital currencies' future. The 24-question survey, designed to be completed in 5 minutes, was created using Google Forms and distributed via social media platforms like Facebook, WhatsApp, Instagram, and various websites. Data collection was supported by Shodhganga and ResearchGate, with some participants reached by email. The target was to gather responses from 50 participants, primarily multinational internet users, with the majority from Bhopal. After processing, 50% of the responses were valid for analysis, while the rest were discarded due to incompleteness. Of the valid responses, 42.10% of participants were aged 18 to 30, accounting for 32.5% of the total. Participants aged 31 to 40 represented 62.5%, while rest are not interested to invest More than half of the respondents were self-employed, with the remainder from the private sector or Business.

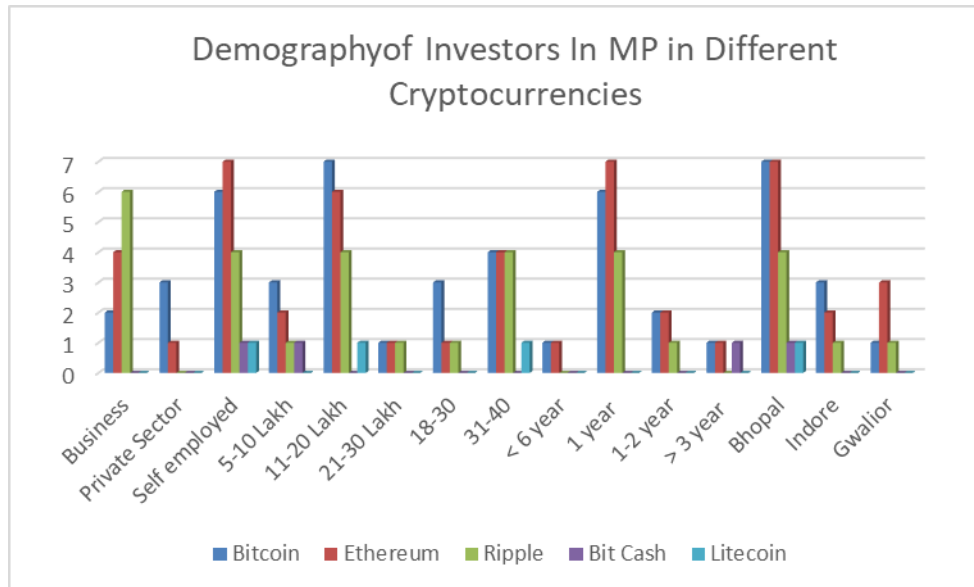


Chart 1: MS. EXCEL

CONCLUSION

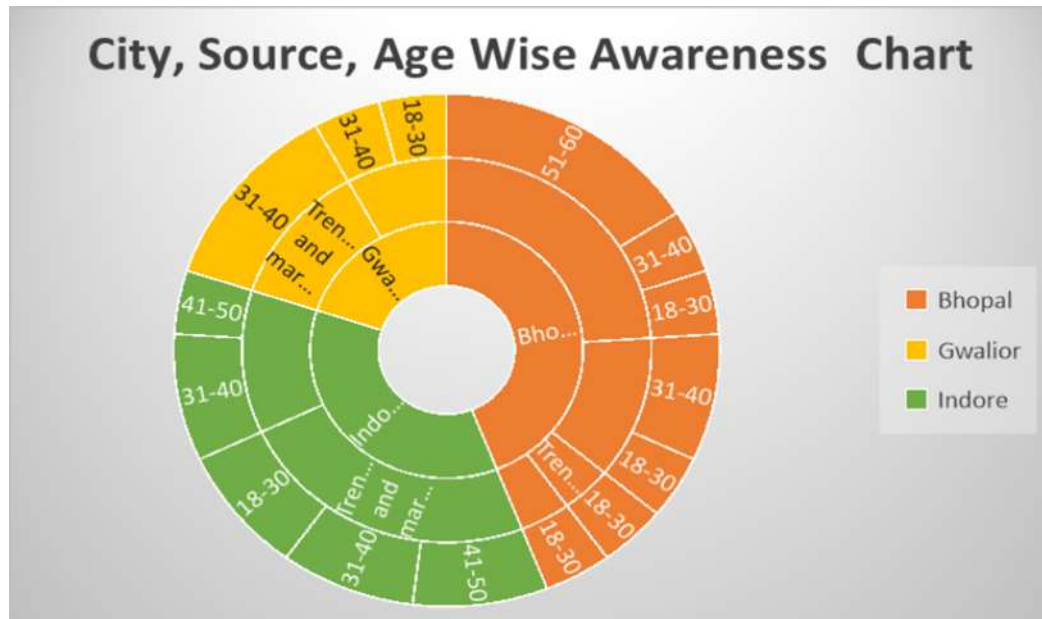
The analysis of cryptocurrency in Madhya Pradesh highlights regional disparities in investment and awareness, with a stronger inclination toward cryptocurrencies in self-employed & service-oriented areas compared to industrial regions. Of the 50 participants surveyed, 32% had invested in cryptocurrencies, while 76% were aware of the digital currency landscape, signalling growing but cautious interest. Bhopal leads in cryptocurrency adoption, with 56.25% of the 16 investors from the city. This can be attributed to the dominance of the service sector, particularly self-employed individuals (50%), many of whom have been trading cryptocurrencies like Bitcoin and Ethereum for over three years. Notably, 68.75% of investors from Bhopal are interested in future investments, showing a strong inclination toward further engagement in the crypto market. Indore, the state's business hub, showed more conservative behaviour, with only 25% of the total investors. The city's business professionals were less active compared to Bhopal, likely due to legal uncertainties surrounding cryptocurrency. This reflects a cautious approach by traditional business owners, particularly those dependent on cash transactions. Gwalior accounted for 18.75% of investors, all from the business sector. Similar to Indore, the conservative stance in Gwalior stems from concerns about cryptocurrency's legal status and stability. Self-employed individuals in Bhopal are the most active investors, making up 50% of the total. Business professionals represent 31.25%, split between Indore and Gwalior. Private sector employees, who account for 18.75%, are mostly from Bhopal and are generally younger (18-30 years). The 31-40 age group dominates cryptocurrency investments, with 62.5% of total investors, characterized by moderate incomes (INR 5-20 lakh) and trading experience of one to three years. Bitcoin (68.75%) and Ethereum (75%) are the most popular cryptocurrencies among investors, reflecting trust in these digital assets across professional categories. Ripple (37.5%) also has a smaller, but significant share among business professionals. While 68.75% of investors expressed interest in further investments, 31.25% remain hesitant, particularly due to concerns about the legal status of cryptocurrencies in India, especially among government employees.

City	Profession	Age	No of People
Bhopal	Private Sector	18-30	1
	Sel Employed	18-30	2
	Self Employed	31-40	6
Gwalior	Business	18-30	1

	Business	31-40	2
Indore	Business	18-30	1
	Business	31-40	1
	Private sector	18-30	1
	Private sector	31-40	1

Table 2- City wise adaption trends

Awareness of cryptocurrency stands at 76%, with the 31-40 age group being the most informed, primarily relying on research reports and market trends. While 44% of those aware are willing to invest, concerns about a potential "bubble burst" persist. Among the willing investors, 50% are optimistic about the market's stability, whereas 36.36% express concerns over a possible collapse, reflecting broader uncertainty in the cryptocurrency market.



RESULTS

The final verdict from the data suggests that while cryptocurrency awareness and investment are gaining traction in Madhya Pradesh, 70% people are aware of Cryptocurrency but 30% people are investing in it particularly in cities like Bhopal and among self-employed individuals, government sector people are completely against of it so 0% involvement in CC, Female are not aware of CC in MP those who are aware they don't have enough amount to invest, legal and trust concerns still hinder broader adoption. The majority of investors show interest in further investment, particularly in Bitcoin and Ethereum, yet hesitation persists due to uncertainties regarding the legal status of cryptocurrencies in India. Despite optimism about the market's future, legal clarity and regulatory assurances will be critical in fostering wider acceptance, especially among government employees and business professionals. Additionally, the imposition of a 30% tax on cryptocurrency gains by the Government of India may be influencing investment decisions, as it adds significant financial consideration for potential investors. The regulatory environment, including legal obligations and tax implications, further underscores the importance of informed decision-making. The findings highlight the need for further education and awareness to address the uncertainties, perceptions, and legal implications regarding the cryptocurrency market in India.

SUMMARY

Cryptocurrency adoption in Madhya Pradesh remains nascent, with interest concentrated in service-oriented regions like Bhopal. Self-employed individuals, particularly in the 31-40 age group, show strong interest in Bitcoin and Ethereum. However, legal uncertainties and trust issues continue to hinder broader adoption, especially in industrial regions like Indore and Gwalior. The future of cryptocurrency investment in Madhya Pradesh will depend heavily on regulatory clarity, which could pave the way for more widespread adoption across different sectors and regions. Sustained growth in cryptocurrency will require not only market stability but also supportive legislation addressing concerns over legality and investor protection.

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