

The Factors That Influence the Intention to Use Cryptocurrency Among Youth In India

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Abstract

This research study examines the factors influencing the intention to use cryptocurrency among Gen-Z in India. The study focuses on the relationship between the dependent variable, behavioural intention to use Cryptocurrency, and several independent variables, namely perceived usefulness, perceived ease of use, trust and safety, social influence. The study adopts a convenience sampling method, collecting responses from 205 participants. A Likert scale questionnaire is used to gather data, and the research framework is based on the Technology Acceptance Model (TAM). The collected data undergoes correlation analysis, Cronbach alpha test, and multiple linear regression model analysis. The study aims to provide valuable insights into the determinants of youth's intention to use Cryptocurrency, contributing to the existing literature on technology adoption. This research has practical implications for the development and promotion of digital payment platforms in India, particularly targeting the youth demographic.

I.INTRODUCTION

Indian investors, especially the younger generation, who view cryptocurrencies as an investment opportunity and an inflation hedge, have become more familiar with them. In India, the regulatory landscape relating to cryptocurrencies has been intricate and dynamic. The Reserve Bank of India (RBI), the nation's central bank, issued a circular in April 2018 prohibiting banks from

offering services to people and companies engaged in cryptocurrency operations. However, the Supreme Court of India struck down this directive in March 2020, ruling that it was unconstitutional. Following the Supreme Court's ruling, there have been signs that India is moving in the right direction towards regulating cryptocurrencies.

The Cryptocurrency and Regulation of Official Digital Currency Bill, which the Indian government presented in the early months of 2021 with the intention of developing a framework for regulating digital currencies in the nation. To the best of my knowledge, the bill has not yet become law. In India, a number of cryptocurrency exchanges are in operation, making it easier to purchase, sell, and trade digital assets. The prominent exchanges WazirX, CoinDCX, ZebPay, and Bitbns are just a few examples. Bitcoin, Ethereum, Ripple, and other cryptocurrencies are available for trading on these platforms. Indian investors and dealers have been more interested in cryptocurrencies, especially among the younger generation. Many people view cryptocurrency as an inflation hedge and an investment opportunity.

Additionally, a number of industries, including finance, supply chain management, and healthcare, have shown interest in blockchain technology. The cryptocurrency market is subject to hazards just like any other financial sector. The price volatility of cryptocurrencies is well-known, and it can lead to substantial gains or losses. Before investing in cryptocurrency trading, investors must exercise prudence, do extensive research, and take their risk tolerance into account.

Research Objective

1. To determine the impact of perceived utility on Indian youth's behavioural intention to use cryptocurrency.
2. To examine the impact of perceived ease of use on Indian youth's behavioural intention to use cryptocurrency.

Literature Review

From the perspective of the user, the main factors influencing bitcoin use were explored by (Arias-Oliva et al., 2019). The authors tested a model using the TAM framework that explained 85% of the intention to utilise cryptocurrencies. A standardised questionnaire was administered to 402 participants. The potential presence of dimensions in the scales was investigated using principal component exploratory factor analysis with Varimax rotation. The number of determinants was tested using exploratory factor analysis.

Generation Z, born between 1997 and 2012, is a generation that has grown up in a highly digitalized world. They are tech-savvy, highly connected, and have a

preference for digital payments. Cryptocurrencies, with their decentralized and borderless nature, have gained significant popularity among this generation.

(Saiedi et al., 2021) highlights the global factors that stress the adoption of cryptocurrencies. The authors examine the development of the infrastructure required to support daily bitcoin transactions across the globe. Investigations of bitcoin adoption's determinants included looking at legal, criminal, financial, and societal factors.

Research Methodology

Framework

According to the TAM model, these elements influence a person's adoption of and use of technology:

Perceived Usefulness: This measures the degree to which an individual thinks that utilising a certain technology would improve their performance or productivity at work. Technology's perceived value, ability to assist users in achieving their objectives, and ability to meet their needs are all aspects that affect how helpful users believe technology to be.

Perceived Ease of Use: This reveals how strongly a person feels that utilising a certain technology will be straightforward and uncomplicated. How complicated a piece of technology is seen to be, how well-versed a user is in using it, and how much training is required to utilise it all have an impact.

Trust and safety: The TAM model take into account the possibility that a person's adoption and use of a given technology or system may be influenced by how much confidence they place in it. Trust is the conviction that a piece of technology will function as expected, be dependable, and secure. The reputation of the technology provider, the perceived danger of utilising the technology, and the person's prior experience with the technology.

Social Influence: TAM model recognises that social factors, such as the views and actions of one's peers, co-workers, or superiors, may have an impact on a person's decision to accept and use technology. There are two types of social influence: normative and informational. The pressure a person experiences to live up to the standards of their social group is referred to as normative social influence. The term "informational social influence" describes how much someone is impacted by the thoughts and information of others.

Hypothesis Testing

- **H0:** Perceived usefulness has no appreciable influence on a person's behaviour on their intention to utilise cryptocurrencies.
- **H1:** The intention to use cryptocurrencies is significantly influenced by the perceived usefulness.

- **H0:** Perceived ease of use has no appreciable influence on a person's behaviour on their intention to utilise cryptocurrencies.
- **H2:** The intention to use cryptocurrencies is significantly influenced by the perceived ease of use.

Research Design

The research design is the strategy a researcher use to carry out a study or research project. It describes the techniques, steps, and strategies that will be taken to gather and analyse data in order to discover the solution to the research question or arrive at the intended result. Research design involves making choices on the research methodology to be used, the sample plan, the methods to be used for data collection and analysis, as well as the length of the study. The goal of research design is to guarantee that the study is conducted methodically, rigorously, and that the findings are reliable, accurate, and applicable to the target audience.

Types of Sampling

Probability sampling

A statistical technique called probability sampling selects a representative sample at random from a larger population. Every member of the population has an equal chance of being chosen for the sample thanks to probability sampling.

Non-probability sampling

Non-probability sampling is a form of sampling technique in which individuals or groups are picked at random from the population. The choice is made instead based on usefulness, accessibility, or the researcher's personal preference.

Data Analysis

Table 1
Age

Age	Freq	%	Valid %	Cum. %
18 - 24	200	97.6	97.6	97.6
25 - 30	5	2.4	2.4	100
Total	205	100	100	

Regarding the study's focus on Indian Gen-Z's intention to use cryptocurrencies, the table displays the respondents' ages. The "Age" variable has two categories: 18–24 and 25–30. The majority of the responders (97.6%) are

between the ages of 18 and 24, while only 2.4% are between the ages of 25 and 30. This distribution suggests that the sample is primarily made up of Gen-Z people, with a concentration that is particularly high in the 18–24 age range.

Understanding the demographic makeup of the sample and its applicability to the research question requires knowledge of this information. The large percentage of Gen-Zers means that the study's findings and conclusions will probably apply and be more relevant to this particular age group. It also shows that the study's emphasis on Gen-Z's inclination to utilise cryptocurrencies is consistent with the respondents' age distribution.

Table 2
Gender

Gender	Freq	%	Valid %	Cum. %
Male	75	36.6	36.6	36.6
Female	130	63.4	63.4	100
Total	205	100	100	

The gender distribution of survey participants is shown in the table with reference to the study's focus on Indian Gen-Z's inclination to utilise cryptocurrency. Male and female are the two subcategories of the "Gender" variable. The majority (63.4%) of respondents identify as female, compared to 36.6% of men. According to this distribution, no. of female response in the sample is more than male response.

Table 3
Educational Qualification

Educational Qualification	Freq	%	Valid %	Cum %
High school diploma	5	2.4	2.4	2.4
Bachelor's degree	90	43.9	43.9	46.3
Master's degree	110	53.7	53.7	100
Total	205	100	100	

The study's focus on Indian Gen-Z's propensity to use cryptocurrencies is illustrated in the table along with the distribution of respondents' educational backgrounds. The "Educational Qualification" variable has three levels: high school diploma, undergraduate degree, and graduate degree. Only 2.4% of responders (their greatest degree of education) is a high school diploma. Compared to the majority (43.9%) of persons who hold bachelor's degrees, a significant portion (53.7%) of people have master's degrees. This distribution indicates that the sample contains

individuals with a little bit more education, with a higher proportion of respondents holding Bachelor's and Master's degrees.

Table 4
Income

Income	Freq	%	Valid %	Cum %
>10000	120	58.5	58.5	58.4
10000-20000	20	9.8	9.8	68.3
20000-30000	50	24.4	24.4	92.7
30000 or more	15	7.3	7.3	100
Total	205	100	100	

In light of the study's emphasis on Indian Gen-Z's propensity to use cryptocurrency, the table shows the respondents' monthly income dispersion. The four ranges for the "Monthly Income" variable are less than \$10,000, \$10,000-20,000, \$20,001-30,000, and \$30,000 or more. The majority of respondents (58.5%) stated that they made less than \$10,000 each month. 9.8% of respondents claimed an income of between \$10,000 and \$20,000, while 24.4% reported an income of between \$20,000 and \$30,000. 7.3% of respondents reported having a monthly salary of \$30,000 or more.

Descriptive Analysis

Table 5
Descriptive Analysis

	Perceived Usefulness	Perceived ease of use	Trust & safety	Social Influence	Intention to use
N	205	205	205	205	205
Min	1	1	1	1	1
Max	5	5	5	4	4
Mean (Avg)	3.439	3.4146	3.3171	3.1463	3.2927
Std.Dev	0.73594	0.8568	0.89768	0.78469	0.77472
Skewness	-0.905	-0.676	-0.67	-0.572	-1.199
Kurtosis	1.474	1.329	0.438	-0.296	1.544
Total	205				

The table below provides descriptive statistics for the following five criteria connected to the study's focus on Gen-Z plans to use cryptocurrencies in India: Behavioural intent to use, perceived utility and simplicity of use, social influence, and trust and safety. Perceived Usefulness: Indian Gen-Z's regard cryptocurrencies to be

of average value, with a mean perceived utility score of 3.4390. The evaluations, which range from 1 to 5, show some diversity in perceptions. The standard deviation of 0.73594 for the perceived utility ratings indicates that there is a significant degree of variation. The skewness score of -0.905, which indicates a minor negative skewness in the distribution, shows that most respondents gave perceived utility ratings that were higher than the midpoint.

Research Findings and Conclusion

Research Findings for Hypothesis

Hypothesis H0H2

- **H0:** Perceived usefulness has no appreciable influence on a person's behaviour on their intention to utilise cryptocurrencies.
- **H1:** The behavioural intention to use cryptocurrencies is significantly influenced by the perceived usefulness.

In summary, the results of the multiple regression analysis indicated that perceived usefulness has a significant relationship with behavioural intention to use cryptocurrencies, with a regression coefficient of 0.417 indicating a positive significant relationship and a P-value of 0.00, less than 0.05, indicating a significant relationship. Thus, we disregard the null hypothesis. The findings are in line with those of a number of earlier scholars. (Johnson et al., 2020) investigate how the introduction of cryptocurrencies affects financial inclusion in Sub-Saharan Africa and discover a favourable significant influence on perceived utility. The study demonstrates how cryptocurrencies can increase economic empowerment and give people access to financial services, increasing their perceived value for people in underserved region.

Hypothesis H0H2:

- **H0:** Perceived ease of use has no appreciable influence on a person's behaviour on their intention to utilise cryptocurrencies.
- **H2:** The behavioural intention to use cryptocurrencies is significantly influenced by the perceived ease of use.

Recap: According to the results of the multiple regression analysis, there is no significant relationship between perceived ease of use and behavioural intention to use cryptocurrencies. The P-value for this relationship is 0.131, which is greater than 0.05, and the regression coefficient is 0.107, which indicates that there is no significant relationship in either direction. So, we agree with the null hypothesis. The findings are in line with those of a number of earlier scholars.

According to a 2018 study by Smith et al., there is a negative significant impact on users' perceptions of how easy it is to utilise cryptocurrencies. The study highlights the main elements influencing consumers' perceived usability as being sophisticated user interfaces, security issues, and technological hurdles.

Limitations of the Study

There are various constraints that should be noted when researching the variables impacting Gen-Z's inclination to utilise cryptocurrencies in India using the TAM framework. Some possible restrictions include:

Generalizability: It's possible that not all of India's Gen-Z population can be fully accounted for by the study's findings. The research sample might not accurately reflect all of the target population's varied traits, mannerisms, and attitudes.

Sample Selection Bias: The study's sample may have been chosen unfairly, which could have an impact on the results' external validity. For instance, if the sample is made up of people who are already interested in or involved in cryptocurrencies, the findings might not accurately reflect the opinions and intentions of the general community.

Self-Reported Data: The study may rely on self-reported information gleaned from questionnaires or interviews, which may create response bias. Potential measurement mistakes could result from participants giving answers that are socially acceptable or from them having trouble accurately recalling their past experiences and perceptions.

Causality and Temporal Order: Although the TAM framework sheds light on the connections between variables, causality is not established. The study might have a hard time determining which characteristics have the most bearing on participants' intentions to utilise cryptocurrencies. Furthermore, the cross-sectional design of the study may have missed changes in variables and intents over time.

Contextual Factors: It's possible that the study didn't properly account for the impact of contextual factors unique to India or the Gen-Z population. Although they might not be explicitly taken into account within the TAM framework, factors like socioeconomic conditions, regulatory environment, and cultural norms may have an impact on the adoption of cryptocurrencies.

Limited range of variables: Although the study focuses on perceived usefulness, trust and safety, perceived ease of usage, and social influence, other pertinent variables may exist that could affect Gen-Z's intention to adopt cryptocurrencies. Although not specifically addressed in the study, factors including financial knowledge, perceived financial risk, and institutional support may be important.

Evolving Technology Landscape: Both user behaviour and cryptocurrency technology are continually changing. As new platforms, technology, and trends develop, the study's conclusions could become out of date and have an impact on how likely Gen-Z is to utilise cryptocurrencies.

II.CONCLUSION

In conclusion, used the TAM framework model to examine the elements that affect Gen-Z's intention to utilise cryptocurrencies in India. Perceived usefulness, trust and safety, perceived usefulness, and social impact are among the aspects that were looked at. For many parties working to encourage Gen-Z in India to adopt cryptocurrencies, the findings offer insightful information. First, it was shown that perceived of ease of use were a key factor influencing users' intentions to adopt cryptocurrencies. To make cryptocurrency platforms and applications easier to use, it is essential to provide user-friendly interfaces and offer clear instructions. To find and fix any obstacles or problems, usability testing and user feedback should be used. Second, perceived usefulness became a significant factor in determining intention to utilise cryptocurrencies. It is crucial to highlight the useful advantages, such as quick and affordable transactions, worldwide accessibility, and investment prospects. Sharing real-world success stories and showcasing the value of cryptocurrencies in regular transactions can promote acceptance and increase credibility.

III.REFERENCES

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