

“Crypto Currency: A Study to Determine the Relevance of Investment Option with Special Reference to Investors of Gujarat”

By

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Abstract

Cryptocurrency is the latest concept of digital currency which avails the cryptography and blockchain technology for speedy and secure transactions. It's almost a decade that Crypto currencies exist in all over world but still its status has not been identified as whether it will ever attain the actual currency status or it will remain as a part of investment portfolio. This paper investigates the user's expectations of the future of cryptocurrency. It also explores the users' confidence of dealing with cryptocurrency in a time that using such virtual money is not fully controlled and regulated. Besides, the paper is aimed to measure the spread of cryptocurrency adoption and practical usage for having a crystalline idea.

Keywords: Cryptocurrency, Cryptography, Blockchain, Transactions, Investment, Portfolio.

Introduction

World economy is moving towards the technological enhancement with advancement of each and every sector. Finance sector is one of the core sectors in world economy, so it is required to digitalize sector with necessary improvisation with regard to sector development and growth. Global financial crisis due to insolvency of Lehman Brothers, Satyam Scam and many more, enforced global leaders for finding out an effective solution which emerged in the form of crypto currency.

Crypto currency is defined as; A cryptocurrency, crypto-currency, or crypto is a digital currency designed to work as a medium of exchange through a computer network that is not reliant on any central authority, such as a government or bank, to uphold or maintain it. (Forbes Advisor, 2022) There is no such thing as digital currency in actual structure (like paper cash) and is ordinarily not given by a focal power. Cryptographic forms of money normally utilized decentralized control rather than a national bank advanced cash. At the point when the cryptographic money is printed or made proceeding issuance or given by a solitary guarantor, it is by and large thought to be incorporated. When carried out with decentralized control, every digital money manages appropriate record of innovation, ordinarily a block chain, which

fills in as a public monetary exchange information base. The digital money is a tradable computerized resource or advanced type of cash, based on blockchain innovation that mainly exists on the web. Digital forms of money use encryption to verify and secure exchanges, henceforth their name. There are at present more than 1,000 different digital currencies on the planet, and their allies consider them to be the way in to a more attractive future economy.

Bitcoin, first delivered as open-source programming in 2009, is the main decentralized digital money. Since the arrival of bitcoin, numerous other digital currencies have been made. In 1983, the American cryptographer David Chaum considered mysterious cryptographic electronic cash called e-cash. Afterward, in 1995, he carried out it through Digicash, an early type of cryptographic electronic instalment which required client programming to pull out notes from a bank and assign explicit encoded keys before it tends to be shipped off a beneficiary. This permitted the computerized money to be untraceable by the responsible bank, the public authority, or any outsider.

In 2009, the principal decentralized digital money, bitcoin, was made by probably pseudonymous designer Satoshi Nakamoto. It utilized SHA-256, a cryptographic hash work, in its confirmation of-work plot. In April 2011, Name coin was made as an effort to frame a decentralized DNS, which would make web restriction undeniably challenging. Before long, in October 2011, Litecoin was delivered. It utilized scrypt as its hash work rather than SHA-256. Another remarkable cryptographic money, Peercoin, utilized a proof-of-work/evidence of-stake mixture. On 6 August 2014, the UK reported its Treasury had dispatched an investigation of digital currencies, and which job, if any, they could play in the UK economy. The review was likewise to write about whether guideline ought to be thought of. Its last report was distributed in 2018, and it gave a meeting on crypto assets and stable coins in January 2021.

The legitimacy of every cryptographic money's coin is given by a blockchain. A blockchain is a ceaselessly developing rundown of records, called blocks, which are connected and gotten utilizing cryptography. Each square ordinarily contains a hash pointer as a connection to a past square, a timestamp and exchange information. By plan, blockchains are innately impervious to alteration of the information. It is "an open, disseminated record that can record exchanges between two gatherings effectively and in an irrefutable and long-lasting manner". For use as an appropriated record, a blockchain is normally overseen by a distributed organization all things considered sticking to a convention for approving new squares. When recorded, the information in some random square can't be modified retroactively without the modification of every single ensuing square, which requires arrangement of the organization greater part.

Blockchains are secured by plan and are an illustration of a disseminated processing framework with high Byzantine adaptation to internal failure. Decentralized agreement has in this manner been accomplished with a blockchain.

Review of Literature

Peter De Vries (2016) has explored the study with the help of SWOT Analysis upon Bitcoins alongside the other Cryptocurrency and had given end on its future point of view. The strength of the bitcoins existed in its plan that was more predetermined number of its creation which won't ever confront initiation pressure. The weakness of the Bitcoins again lied in its exchange process where every single exchange was apparent to all open record chains which could be powerless for some digital assaults and robberies. The Opportunity could be seen through, by expanding the imaginative advances associated with Cryptocurrency like

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Cryptography and Blockchain to current Banking and Financial System which could be made safer and decentralized framework. The threats were connected with the highly unstable nature of this virtual digital currency, which could be settled across the globe, on the off chance that it tends to be regularized consistently. The future was as yet dubious especially for these monetary forms however the advancements related with it would be the new blast across the globe.

Shailak Jani (2018) has tried to explain how technology has led to the origin of Cryptocurrency and its growth trend in global market as well as its business in Indian market. The paper focused upon the expectations and confidence of the users towards cryptocurrency. The paper also envisaged that how 21 countries of the world had reacted towards crypto currency i.e. whether Friendly or Neutral or Hostile stance towards it.

Swati Shukla and Akshay (2019) said that people were aware of the Cryptocurrency and they would like to see it as part of their investment portfolio as it provides good return. But they were not willing to invest in Cryptocurrency due to lack of regulation from Government and regulatory authorities. If Government of India and its regulatory authorities would come forward to regulate its use and transaction in financial market, it could have played a major role in entire investment portfolio. They have concluded it demographically with the help of frequency analysis and percentage method via primary data through questionnaire. Their study also suggested that Indian Government and its regulatory authority should come forward and take steps to regulate the transactions of Crypto currency as investment option.

Anil Kumar, Swathy. P, (2019) has tried to comprehend the crypto currency through various dimensions such as different categories of crypto currency to make investments, functioning of cryptocurrency. Study tried to explore the main functional unit of crypto currency i.e. bitcoin along with their favourable and unfavourable aspects. The study extended its objectives by including the aim of analysing the legal status along with opportunities and challenges associated with bitcoins in India. The study was completely based on secondary data collected using various sources. The study has mainly focused upon bitcoin and various aspects related to bitcoins which included benefits, limitations, features, functionality etc. The study concluded that bitcoins can be the new emerging source of payment methods also of revenue generation. The major concern study disclosed was the need of regulation among crypto currency. The growing market of bitcoins is lacking from big explosion of investors due to the absence of regulation and legislations. Government and RBI can make the major role play by introducing the regulations with respect to crypto currency and can introduce the biggest alternate of present payment system.

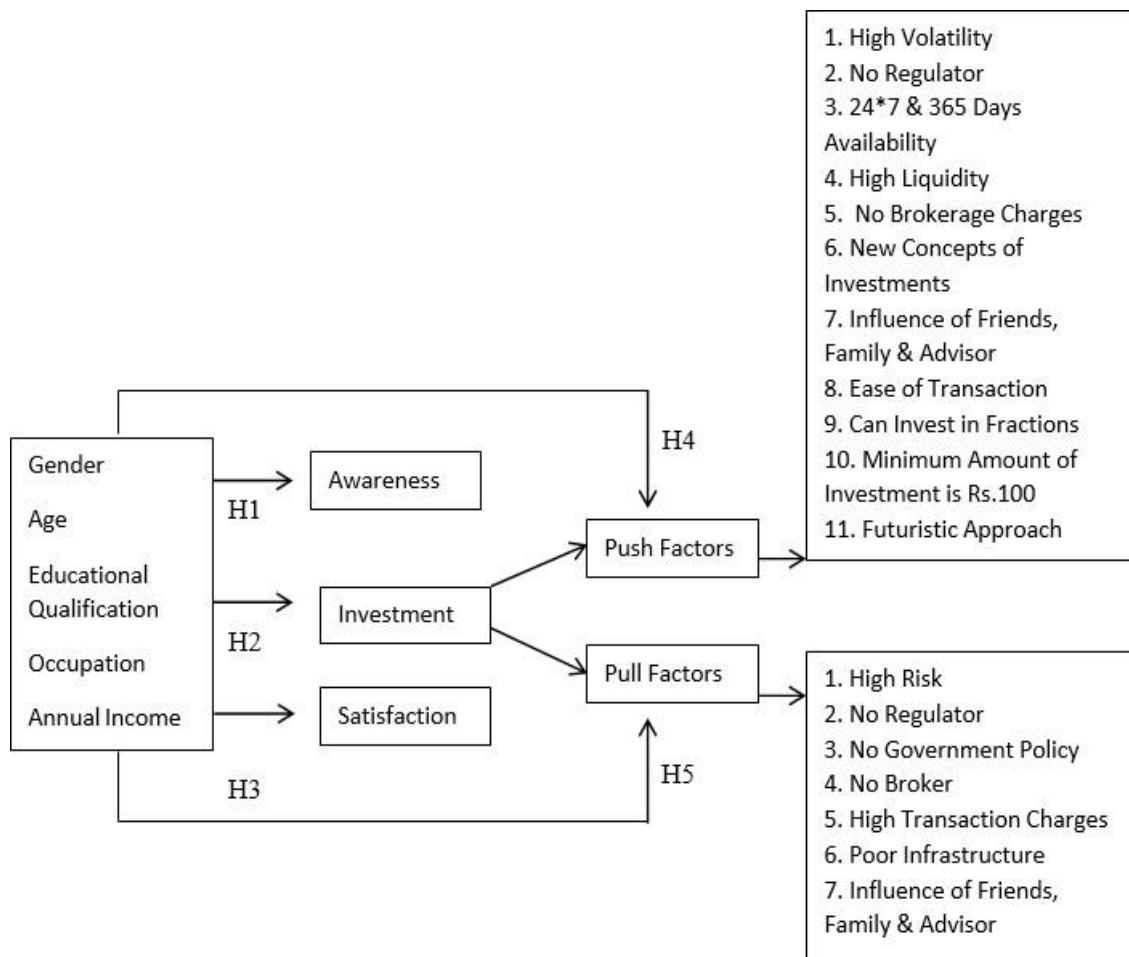
Objectives of the Study

1. To check the awareness about crypto currency among investors of Gujarat.
2. To examine the level of satisfaction among investors with reference to return from cryptocurrency.
3. To identify the main reason for the adoption or non-adoption of crypto currency among investors of Gujarat.

Research Methodology

To fulfil the objectives of study, a correct research methodology is required. The study has descriptive research design and is quantitative in nature. The data used for the study is

completely based on primary survey. The data collection was done with the help of a structured questionnaire among 102 investors of Gujarat state. The study is analysed by taking all the demographic variables as independent variables while awareness, satisfaction and push & pull factors of investment are taken as dependent variables. The data collected is analysed with the help of frequency distribution and chi-square test in order to analyse the association between the variables. The hypothetical model describing the variables and hypotheses is described below:



Hypothetical Model

H1: There is no significant association between demographics and awareness regarding crypto currency

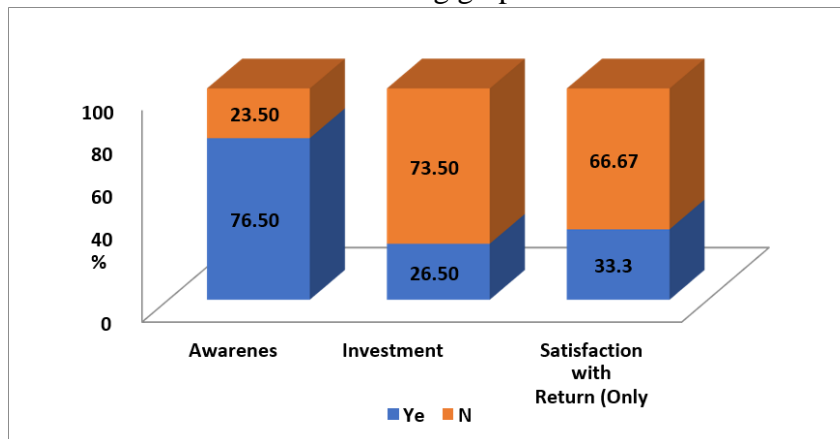
H2: There is no significant association between demographics and investment in cryptocurrency
H3: There is no significant association between demographics and satisfaction from investment return from crypto currency

H4: There is no significant association between demographics and push factors
H5: There is no significant association between demographics and pull factors

Analysis and Interpretation

This study tried to identify the investors approach towards crypto currency. The respondents of Gujarat were approached to explore their fundamental insight towards the respective investment option. The frequency analysis disclosed that among 102 respondents from Gujarat 76.5% i.e. 78 respondents are aware about the crypto currency. But among them only 26.5% i.e. 27 respondents have adopted it as an investment option. And among these 27

investors only 33.33% of respondents are satisfied from the return gained by crypto currency. The data obtained is described in the following graph:



To analyse the situation among investors more critically, the chi-square test is applied here to identify whether the demographic variables have significant association with awareness, investment and satisfaction among investors.

Table 1

Demographics	Awareness	Investment	Satisfaction among Investors
Gender	0.956	0.610	0.482
Age	0.437	0.732	0.655
Education Qualification	0.035	0.754	0.873
Occupation	0.909	0.290	0.168
Annual Income	0.163	0.126	0.386

The above table disclosed that there is no significant association between any demographic variable and awareness regarding crypto currency, investment in crypto currency and satisfaction among investors investing in crypto currency. Hence, as per the results of chi-square test, null hypothesis are accepted.

Table 2

Demographics	Gender	Age	Educational Qualification	Occupation	Annual Income
Push Factors					
High Volatility	0.152	0.697	0.531	0.592	0.763
No Regulator	0.134	0.234	0.696	0.362	0.400
24*7 and 365 Days Availability	0.645	0.610	0.706	0.894	0.929
High Liquidity	0.226	0.333	0.624	0.589	0.325
No Brokerage Charges	0.956	0.897	0.842	0.765	0.618
New Concept of Investment	0.831	0.421	0.328	0.379	0.586
Influence of Friends/Family/Advisor	0.687	0.364	0.184	0.449	0.474
Ease of Transaction	0.617	0.622	0.728	0.759	0.919
Can Invest in Fractions	0.925	0.336	0.950	0.411	0.735
Minimum Amount if Investment is only Rs.100	0.106	0.465	0.795	0.505	0.155
Furistic Growth	0.230	0.597	0.970	0.529	0.353

The above table disclosed that there is no significant association between demographic variables and push factors of crypto currency that push investors to invest in crypto currency. No push factor is contributing significantly in generating interest among investors for investing in crypto currency. Hence, the null hypothesis is accepted here.

Table 3

Demographics	Gender	Age	Educational Qualification	Occupation	Annual Income
Pull Factors					
High Risk	0.201	0.719	0.071	0.654	0.170
No Regulator	0.062	0.459	0.036	0.248	0.038
No Government Policy	0.003	0.260	0.159	0.201	0.025
No Broker	0.101	0.293	0.012	0.277	0.122
High Transaction Charges	0.937	0.478	0.006	0.399	0.412
Poor Infrastructure (Platform) for the Investment	0.033	0.050	0.133	0.326	0.693
Influence of Friends/Family/Advisor	0.374	0.974	0.432	0.189	0.309

The above table disclosed that there are some pull factors that are having significant association with demographic variables of investors. Those pull factors are:

- (i) No Regulator is significantly associated with Educational Qualification with 0.036 value of significance and Annual Income with 0.038 value of significance.
- (ii) No Government Policy is significantly associated with Gender with 0.003 value of significance and Annual Income with 0.025 value of significance.
- (iii) No Broker is significantly associated with Educational Qualification with 0.012 value of significance.
- (iv) High Transaction Charges is having significant association with Educational Qualification with 0.006 value of significance.
- (v) Poor Infrastructure (Platform) for the Investment is having significant association with Gender with 0.033 value of significance and Age with 0.050 value of significance.

Findings

The study revealed that among 102 respondents majority i.e. 76.50% respondents are aware about crypto currency but due to the following reasons only 26.50% respondents have invested in crypto currency. The major reasons for non-adoption are:

1. No government policy
2. High transaction charges
3. No broker
4. No regulator and
5. Poor infrastructure for the investment.

Amongst the investors (26.50%), only 1/3rd i.e. 33.3% are satisfied with the overall return on the investment. Therefore, it is clear that majority of the investors are not satisfied with respective investment option. They might have faced high volatility in this market. Although very few investors are satisfied with the return.

Conclusion

The above study concluded that Cryptocurrency seems to have moved past the early adoption phase that new technologies experience. Crypto currencies are still in their infancy, and it is difficult to see if they will ever find true mainstream presence in world markets. People are not willing to invest in Cryptocurrency due to lack of regulation from Government and regulatory authorities. If Government of India and its regulatory authorities will come forward to regulate its use and transaction in financial market, it can play a major role in entire investment portfolio.

The Cryptocurrency field creates a lot of research opportunities and many studies need to be done in order to provide scientific contents. Moreover, the adoption and acceptance level also needs more consideration and more analysis with large samples. Trust and confidence are important factors that need to be investigated further in terms of using and trading the Cryptocurrency forms. The further research scope can be extended to developing use-cases for applications of cryptocurrency across different sectors in India

Suggestions

- i. Reliability is the biggest issue for the investors in regards of Crypto currency, so government should frame a separate body for regulating and monitoring the transactions.
- ii. Risk involved in Crypto is very high, there are many cases in which the investors lost their money, so government should involve in this matter and try to eliminate this kind of speculative activities.
- iii. In absence of broker trust is the biggest issue regarding crypto so government should try to win trust and confidence of public.
- iv. There is no brokerage charges levied on transactions but high transaction charges on withdrawal of money, so government should monitor it in investor friendly manner.
- v. Many investors found that the platforms are under maintenance so it is one of the big challenge which should be resolved

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