Investors Behavioural Intention of Cryptocurrency Adoption – A Review based Research Agenda

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ABSTRACT

Purpose: *The current study investigates the behavioral intention to use cryptocurrencies. The study's major goal is to prioritize the key motivations behind it mainly Investment in cryptocurrency and to learn the investors behavioral intentions.*

Design/Methodology: *This study examines whether different factors determine the investors towards cryptocurrency usage like Ease of use, Social Impact, Convenience, Trust, Price volatility, Individual believes, Privacy, Risk and Decision making.*

Findings: *This research's findings are intended to provide useful information on behavioral intentions of cryptocurrency users and merchants will be able to construct a viable business strategy to stay competitive.*

Originality: *A literature review is conducted to examine the cryptocurrency usage behavior of Investors. The goal is to review the existing cryptocurrency behavior & try classifying and provide an exhaustive analysis of the determinants influencing the cryptocurrency behavioral intention of its users. Academic references, as well as essential facts and data taken from websites, scholarly articles were used in the study.*

Paper Type: *Review Paper*

Keywords: Cryptocurrency, Blockchain technology, Behavioral Intention, Conceptual frameworks, Theoretical frameworks.

1. INTRODUCTION :

We live in an exponentially advanced technology age. We have moved from stock exchange, mobile banking now cryptocurrency. These technological developments have already made life easier and more viable. Crypto-currency has experienced a massive growth in crypto-currency markets around the globe recently. The disclosure of the determinants for adopting cryptocurrencies worldwide, especially in emerging markets such as India, has been unfortunately paid very little attention. Cryptocurrency is also known as the digital money of the twenty-first century, and it is used to transfer funds between people or institutions via peer-to-peer networks in the form of cryptographic codes (P2P). Blockchain technology is important for transferring cryptographic codes into a decentralized ledger environment across P2P network nodes (Chakravaram, V., et al, (2021) [1]). Firstly, Trading is possible 24 hours a day, seven days a week. Second, valuing crypto currencies, which have many similarities to stocks sold on venture markets, is more difficult than valuing mining enterprises, which may disclose projected earnings based on gold depots and oil bars. For many of these stocks, all that exists are project concepts, a few real assets, and the execution of business strategies. (Granero, R., et al, (2012) [2]). A blockchain is a growing chain, called blocks, which are cryptographically linked and secured. There are various protocols to achieve a blockchain consensus, the main proof-of-stake (PoS) and proof-of-Work (PoW) (Roşu, I., et al, (2021) [3]). At different times in the history of contemporary people, virtual money has become popular. The number of people who now use cryptocurrencies has grown substantially and is comparable with the populations of some small countries. In its simplest form, a cryptocurrency can be regarded as a digital asset, which can act as a cryptographic exchange medium for the control and the control of the creation of additional currency units. (Gil-Cordero, E., et al, (2020) [4]). Few sources have estimated that the nation has between 60,000 lakhs to One Crore cryptocurrency holders with combined balances

greater than Rs 10,000 crore, the largest cryptocurrency exchanges in India — WazirX, CoinDcX and Unocoin. Cryptocurrency is gaining traction worldwide. We're advanced in technology and any progress is unquestionably dangerous. Investors have enormous potential, but it also carries risk (Johar, M., et al, (2021) [5]). The first of these cryptocurrencies, Bitcoin, began operations In January 2009, in the midst of the Great Recession, by purpose or by chance (Huang, W. (2019) [6]). Despite the schism into Bitcoin Cash and the launch of other innovative altcoins such as the programmable Ethereum, Bitcoin remains the most valuable cryptocurrency by value. Cryptocurrency, as a decentralized, digital, programmable money, is well suited to an increasingly digital environment, the Fourth Industrial Revolution, and as a viable alternative to traditional currencies. this centralized world economic order's inadequacies (Rose, C. (2015) [7]). In terms of mainstream attention, the underlying technology has overtaken the Bitcoin application. By decentralizing trust, the blockchain – the immutable distributed digital record – holds not just in the financial industry (Hileman, G., et al, (2017) [8]), but also in other sectors (Hileman, G., et al, (2017) [8]). The first of these technology enablers is cryptocurrency. Cryptocurrency places consumers at the centre of this potential revolution by rejecting central authority in favour of a decentralized peer-to-peer (p2p) monetary system. However, little is known about this critical role in the behaviour and intents of bitcoin adopters. (Raymaekers, W. (2015)-Schuh, S., et al., 2016 [9-10]). As a result, the study presented here seeks to fill in some gaps in this neglected perspective by clarifying why people utilize cryptocurrencies. Since the first of them, Bitcoin, was released in 2009, interest in cryptocurrencies has grown among the media, consumers, governments, and, most importantly, the financial industry. (Miraz, M. H., et al, (2021) [11]).

2. OBJECTIVES OF THIS STUDY :

Cryptocurrencies are inherently volatile. Cryptocurrency is a relatively new phenomena that is gaining popularity. On the one hand, it is based on a fundamentally novel technology, the full potential of which has yet to be realized. Alternatively, it serves the same tasks as other, more traditional assets, at least in its current form.

(1) To review the existing literature on cryptocurrency investing behavioural intention and to comprehend the theories and conceptual frameworks.

(2) To identify the various factors that influence consumer behaviour with regard to cryptocurrency investing.

(3) To assess investors' intentions to adopt cryptocurrencies and their level of acceptance of technology.

(4) To find the appropriate research gap and further research agendas based on the literature review.

(5) To analyze the cryptocurrency using ABCD framework.

3. RESEARCH METHODOLOGY :

In this research work authors are going to review the consumer behavioral intention towards cryptocurrency usage with reference to different countries. The writers of this study employed qualitative research methods. This critical evaluation uses a descriptive technique that is based on observation and collected information from google scholar search using related keywords.

4. OVERVIEW OF CRYPTOCURRENCY :

Digital currency is an electronically created and stored virtual currency that includes cryptocurrency. To protect the currency against falsification, Cryptocurrency is a sort of digital currency used in cryptography. Bitcoin is a popular cryptocurrency example (Rose, C. (2015) [7], Bolici, F., et al, (2016) [12]).

Table 1: Overview of Cryptocurrency using Scholarly articles

S. No.	Findings	Reference
1.	The primary problem of the conventional fiat currency system had been a high transaction cost for a prolonged period. The consequence of that was a successful digital currency market with a reduced risk of settlement, which led to the emergence of alternative currencies that enable a faster peer-to-peer (P2P) time processing.	Chuen, D. L. K., Guo, L., & Wang, Y. et al, (2017) [13].

2.	Cryptocurrency is a subtype of digital money, yet a major digital currency has been established. Cryptocurrency is extremely distinct from the other digital currencies, which is created decentrally, distributed inside or connected within a community or geographical region.	Mas, I., et al, (2015) [14].
3.	Cryptocurrency is a virtual coinage system that works similar to a normal currency, allowing users to virtually pay for products and services without the need for a central authority.	Ciaian, P., (2018) [15].
4.	In a white paper released by Satoshi Nakamoto in 2008, Bitcoin is an open-source digital money originally suggested for peer-to-peer.	Nakamoto, S. (2008) [16].
5.	The market for cryptocurrency is significantly more volatile than conventional markets.	Carrick, J. (2016) [17].
6.	The mechanism of verifying transactions to be unique and trustworthy is computationally intensive "proof of work." Transactors incorporate a transaction charge to check it successfully to incentivize their participation. In Bitcoin this fee is voluntary but in others required.	Harwick, C. (2016) [18].
7.	Blockchain particularly addresses the way data is organised and enables the creation of decentralised digital ledgers.	Seidel, M. D. L. (2018) [19].
8.	Blockchain technology enables cryptocurrency. Bitcoin and Ethereum are two well-known cryptocurrencies. A cryptocurrency, like the US dollar, functions as a medium of exchange, but it is digital and relies on cryptography to control new currency creation and fund verification.	Woodside, J. M., et al, (2017) [20].
9.	Cryptocurrency has lately received considerable interest. All transaction records of cryptocurrencies, enabled by blockchain technology, are irreversible and are kept in blocks. These transaction records comprising rich information and full records of financial activity are accessible to the public and so provide academics new possibilities to explore data mining and find information in this field.	Wu, J., et al, (2021) [21].
10.	Many merchants in Bangalore have been accepting bitcoin, according to CEO and Co-founder Sathvik Vishwanath of Bangalore-based Uno coin, one of the major exchanges of bitcoin in the nation, since it provides trading services. Five of the top firms in India, including Dell, accepted payment for bitcoin. Day by day, the numbers rise.	Singh, A. K., et al, (2018) [22].

5. BEHAVIOURAL INTENTION OF CRYPTOCURRENCY INVESTORS :

Cryptocurrency is described as an automatic and decentralized alternative for government conventional money (S. F. Sun, et al, (2017) [23]). In other terms, Bitcoin is a digital money that protects cryptography through exchange (J. Fry, et al, (2016) [24]).

Table 2: Significant Empirical Studies on Behavioural Intention towards Cryptocurrency use

S. No.	Sample	Key Findings	References
1.	428 individual investors involved in the survey approach.	The majority of users of cryptocurrency range is between 25 and 34 by sex, age and education level, and are university graduates It has been observed that the majority of investors are willing to invest in the exchange of foreign currencies and that their strong profit performance causes substantial interest. and it was shown that investors largely receive information from social media channels regarding the market.	Teker, D., et al, (2021) [25].
2.	The research focuses on	The results will prepare hit and run	AL-

	individual investors investing in the United Arab Emirates' cryptocurrency industry (UAE). There has been a total of 112 usable questionnaires.	investors to stay on the bitcoin market and improve their skills in the most efficient way of securing solid venture selections. The results of the study also motivate financial experts to understand that information on conventional theory of finance is not sufficient to excellence on the dynamic crypto market.	MANSOUR, B. Y. (2020) [26].
3.	A total of 275 Italian investors were polled.	The desire to attain key goals and increase one's quality of life, as well as perceived control, which refers to the sense of having the appropriate means, expertise, and support to utilise cryptocurrencies, both positively influence the desire to invest in cryptocurrency.	Pham, Q. T., et al. (2021) [27].
4.	Data from 102 individuals was gathered using a quantitative technique.	According to the research, the most significant elements for bitcoin adoption are performance and effort expectation, as consumers want to learn what benefits cryptocurrencies might give for them when they feel incapable of utilising the novel technology.	McMORROW, J., et al, (2021) [28].
5.	A total of 150 questionnaires were given to the respondents.	It has been established that the primary factors influencing behavioural desire to adopt blockchain technology are Social influence, enabling conditions and effort expectation with effort expectancy being the most important of all.	NAZIM, N. F., et al, (2021) [29].
6.	The distribution of online surveys to 400 respondents was done using convenient sampling.	Trust, social influence, cyber-security threats, and privacy potential risks are the most significant characteristics that determine bank customers' behavioural intention to utilise FinTech services in Malaysia, according to the research findings.	Submitter, G. A. T. R., et al, (2021) [30].
7.	The data in this study was analysed using the 2018 National Financial Capability Study (NFCS) Investor Survey.	While both Investment experience and financial literacy were favourably related with cryptocurrency investment, investment experience was more significant in cryptocurrency investment.	Zhao, H., et al, (2021) [31].
8.	A total of 395 crypto-asset consumers were surveyed using a novel combination of deep and broad sample techniques.	It has been discovered that crypto-asset users have different security and risk perceptions, which influences their crypto wallet decisions and security procedures.	Abramova, S., et al, (2021) [32].
9.	A suitable sample of 451 MTurk employees was chosen and enticed with a little monetary reward to take part in a cross-sectional	There is evidence to support hypothesis that consumers' trust in cryptocurrencies is influenced by their understanding of cryptocurrencies, their faith in government, and the speed	Arli, D., (2020) [33].

	online survey with bitcoins as the primary product category.	with which transactions are completed.	
10.	Using three-stage criteria, liquid markets (Ripple, Dash Bitcoin, Litecoin, Ethereum, NEO, Zcash and Ethereum Classic) were selected out of a universe of 2,092 digital currencies, accounting for 76.57 percent of the USD 133 billion aggregate market value.	Individual traders minimise their distinctive trading tactics in order to follow other colleagues or the herd on market performance, which not only increases investor risk but also makes markets inefficient and decreases the chance of diversification advantages. Speculative trading is fuelled by this dynamic, exacerbating market uncertainty and volatility.	Omane-Adjepong, M., et al, (2021) [34].
11.	The basic linear granger causality test and the associated VAR analysis were utilised.	The empirical results offer support in the behavioural finance field and indicate that investor attention is the granger cause of fluctuations in the Bitcoin market in terms of both return and realised volatility.	Zhu, P., et al, (2021) [35].
12.	Specific psychological mechanisms have been linked to specific risk factors for excessive crypto trading, such as overestimation of the role of knowledge or expertise, FOMO, obsession, and expected regret.	Cryptocurrency trading is a rapidly developing activity that is expected to gain popular recognition in the next years. We feel that this is an important subject in the field of behavioural addiction research.	Delfabbro, P., et al, (2021) [36].
13.	CoinMarketCap provided daily statistics weekends comprised for eight cryptocurrencies (Ethereum, Bitcoin, DigiByte, Dash, Litecoin, Dogecoin, XRP, NEM) from August 7, 2015 to May 1, 2020 was analysed.	The role of microstructure variables in the convergence behaviour of cryptocurrency closing prices is being assessed using a framework. First, we show that cryptocurrencies with different technical functionalities can converge. Sensitivity: Convergence is driven by internal microstructure behaviour.	Apergis, N., et al (2021) [37].
14.	280 samples were collected from South Africa to better understand consumer usage of cryptocurrencies.	According to the statistics, building support mechanisms around usage – referred to as enabling conditions – is arguably the most efficient way of promoting adoption. According to the research, a pleasing experience most significantly indicated the propensity to utilise Bitcoin. In terms of the degree and order of these impacts, both of these conclusions contradict. This results in the majority of research in important financial technology adoption areas.	Mahomed, N. (2017) [38].
15.	Interviews were done with a group of ten male millennials who have already accepted and own/use cryptocurrencies.	The key driver of bitcoin adoption appears to be price volatility, which has been aided by social networks and the fact that millennials are more ready to take bigger risks. as a result of their	Walsh, C. (2018) [39].

		preceding decade's exposure to volatile economic conditions.	
16.	A survey was undertaken to gather information for an examination of individuals' intentions to adopt Bitcoin. For the study, a pilot study with 50 participants was undertaken.	According to the research, perceived ease of use and utility have a favourable impact on the desire to use Bitcoin.	Nadeem, M., A. et al, (2021) [40].

6. FACTORS INFLUENCING CONSUMER BEHAVIORAL INTENTION TOWARDS CRYPTOCURRENCY USE :

Based on

(1) Ease of use:

Cryptocurrency is a type of decentralized digital money that is kept online and is not regulated by governments or banks. The results of the interviews revealed that most participants have a clear knowledge of the nature of cryptocurrency, despite some misunderstandings. Most participants were able to describe technical elements of cryptocurrency, such as mining and market cap. The major purposes of cryptocurrency, according to participants, were investment and money. Perceived benefits of cryptocurrencies include decentralization, security, anonymity, simplicity of use, and cheap costs. Where in, everyone agreed that they will continue to use cryptocurrencies in the future. (Shaalan, K., et al, (2020) [41]).

(2) Social Impact:

Data show that online investor sentiment is a substantial nonlinear predictor of most major cryptocurrency returns, indicating the superiority of Twitter over Google-based online investor sentiment proxies. Furthermore, cryptocurrency returns appear to be driven more by mood relayed via social media than by macroeconomic news, which is consistent with the character of bitcoin participants, who are primarily young computer fanatics. (Naeem, M. A., et al, (2021) [42]). The results suggest that individual tweets can have a large impact on cryptocurrency returns and trading volumes, and can thus serve as a foundation for much more study. (Ante, L. (2021) [43]). During the social media age, crypto trading has also evolved. As a result, a significant social media culture of crypto advisors, strikers/influencers, and more seasoned advisers has emerged on channels like as YouTube. A brief web search reveals that at least one major currency has at least one good recommendation (Delfabbro, P., (2021) [36]).

(3) Convenience:

Cryptocurrencies can be utilized outside a certain geographical area. They are now possible because to blockchain technology, which ensures their security, eliminates the problem of double-spending, and provides incentives for customer engagement. They can be appealing to small companies by encouraging residents to engage in commercial activities in the neighborhood. Consumers are encouraged to support local businesses while also benefiting from a convenient payment method and the opportunity to earn bitcoin incentives (Shaw, N. (2018) [44]).

(4) Trust:

Consumers are more inclined to trust cryptocurrencies and peer-to-peer transactions if they are not issued by a central issuer and controlled by their individual governments. (Arli, D., (2020) [33]).

(5) Price Volatility:

Both investors and researchers pay close attention to the volatility of various cryptocurrency values. Due to pricing and stochastic impacts in the market, forecasting cryptocurrency prices is a difficult process. (Zhao, H., et al, (2021) [31]). The link between liquidity volatility and returns of five high capitalization cryptocurrencies is examined. According to the findings, there is a positive association between liquidity volatility and overall returns. This indicates that investor's view liquidity volatility over time as a risk that should be mitigated by higher rewards (Leirvik, T. (2021) [45]).

(6) Individual Believes:

We shed light on the role of beliefs for asset demand using the cryptocurrency industry as a laboratory. Reduced-form evidence and a structural model of asset demand point to an important impact of beliefs on individuals' holdings of cryptocurrencies and their equilibrium prices. (Benetton, M., et al, (2021)

[46]).

(7) Privacy:

The goal of designing privacy-enhanced software should be easy-to-use software that preserves the holistic privacy of users. As our study showed, it is difficult for even highly motivated and technically adept users to use anonymous cryptocurrency wallets at the present moment in a way that preserves their holistic privacy due to the fundamental disconnection of network level and on-chain anonymity (Halpin, H. (2021) [47]). A centralized exchange where a trusted party receives tokens on the different ledgers and transfers the exchanged tokens accordingly based on some centrally decided exchange rate. An example of this is Coinbase or Kraken. A solution using atomic-swap as employed by current decentralized exchanges. where hash time locked contracts are used to ensure that the required transfers actually get carried out. (Baum, C., et al, (2021) [48]).

(8) Risk:

Depending on the sort of uncertainty, the bitcoin market reacts in different ways. Overall, our data imply that bitcoin returns are heavily influenced by uncertainty. (Colon, F., et al, (2021) [49]) The risk assessment was calculated as the difference between the most likely profit value and the danger zone's boundary. Based on the updated optimization, a set of optimum cryptocurrency portfolios was created. (Boiko, V., et al, (2021) [50]). Two market-specific indicators – momentum and investor interest – may be used to forecast bitcoin profits. Our findings call into question common arguments that supply parameters like mining costs, price-to-"dividend" ratios, and realized volatility may be used to forecast bitcoin return behavior. Finally, we show that the blockchain technology inherent in cryptocurrencies has the potential to have a significant impact on a number of key businesses. (Liu, Y., et al, (2021) [51]).

(9) Decision Making:

The recent boom and collapse of the cryptocurrency market has piqued the interest of investors, regulators, and other financial industry participants. The interconnections between the cryptocurrency market and the technology industry are investigated in this research, which contributes to the expanding body of knowledge. (Umar, Z., et al, (2021) [52]). It's worth mentioning that cryptocurrency investors and financial analysts care more about future cryptocurrency price movements than they do about knowing the precise future price in order to make informed investment decisions. We may infer that the presented model is typically preferred for supporting policy decision-making and cryptocurrency market behaviour since the directional movement prediction problem is more significant than the price prediction problem. (Livieris, I. E., et al, (2020) - Pintelas, E., et al, (2020) [53-54]). The great majority of economists and experts feel that cryptocurrencies are speculative financial assets that are best used for short-term investments (see, for example. As a result, it would be important to establish appropriate forecasting tools for decision-making in the bitcoin market. (Ciaian, P., et al, (2016) [55]).

7. CONSUMER ACCEPTANCE OF USE OF TECHNOLOGY :

Several variables can impact investors' acceptance of new technologies. The intention to use a technology is followed by its actual acceptance and use with cognitive constructs. (Ferreira, J. B., et al, (2014) [56]).

Table 3: Review on acceptance of technology

Serial No	Contribution	References
1.	Cryptocurrencies are an extremely new that is rapidly developing. As a result, technology and people's knowledge of financial technology will continue to advance in the near future.	Arias-Oliva, M., et al, (2019) [57].
2.	Users' perceptions of ease of use and its relevance in recognising issues that develop throughout the adoption and familiarisation process with cryptocurrencies. Similarly, Despite the fact that cryptocurrencies are not yet widely utilised in e-commerce, this research looks into how ease of use affects trust in them.	Mendoza-Tello, J. C., et al, (2019) [58].

3.	Cryptocurrency was introduced as a new financial instrument that relies on blockchain technology.	Yeong, Y. C. (2019) [59].
4.	Because of the technical nature of cryptocurrencies, a rise in technological understanding is thought to be crucial and have a beneficial impact on attitudes of cryptocurrency users	Alaeddin, O., et al, (2018) [60].
5.	The public's awareness of blockchain and cryptocurrencies has risen tremendously, although in diverse directions depending on the user's perspective. Many people have become users and investors in cryptocurrencies such as Bitcoin and Ethereum, paving the path for the formation of small and medium-sized enterprises.	Zulhuda, S., et al, (2017) [61].
6.	The blockchain was initially explained in the context of Bitcoin, but it has since been adopted by plenty of other cryptocurrencies, including Litecoin and Ether. Cryptocurrencies are virtual currencies that are managed and hedged through cryptographic techniques rather than through a central administrative entity.	Weber, K., et al, (2020) [62].
7.	The number of publications on Bitcoin has risen dramatically in recent years, with the most of research concentrating on technology, such as mining pool behaviour, bitcoin and blockchain use cases, privacy issues, system security and stability, and cryptocurrency growth.	Steinmetz, F., et al, (2021) [63].

8. THEORIES INFLUENCING BEHAVIORAL INTENTION :

(1) TAM (Technology acceptance Model):

Davis' approach for studying the practical use of behavior of users of new technology (Davis, F. D. (1989)) [64] was developed in 1989 and is widely accepted. The Theory of Reasoned Action (TRA) model is used to create the TAM model. People's conduct is defined by their desire to carry out their activity, according to these theories (TRA and TAM) (Davis, F. D. (1985)) [65] a well-known, influential, and frequently used model of information system use and acceptance behavior that may be applied to a range of situations. Study of information technology and information systems (Chengyue, Y., et al, (2021) [66]). In the original TAM, a user's behavioral desire to utilize a certain service was considered. Two key antecedents influence technology: perceived ease of use and perceived usefulness (Venkatesh, V., et al, (2000) [67]). TAM has been around for a while. Effectively employed to explain gender inequalities in technology perception and social use.

(2) TPB (Theory of Planned Behavior):

The TPB was created to anticipate actions that are not totally under the control of the individual (Orbell, S., et al, (1997) [68]). The model has been used to predict intentions to embrace new technologies in a number of correlational studies (Mahardika, H., et al, (2019) [69]). TPB considers intention to be a direct antecedent of conduct. Intention is a function of attitude towards the activity, subjective norm, and perceived behavioral control at the same time. Several correlational investigations corroborate the TPB's power to predict behavioral intentions, demonstrating the model's predictive potential (Sharma, A., et al, (2019) [70]). In terms of its value in predicting customer intention and assisting management decision making, the TPB theory has proved to be beneficial (Côté, F., et al, (2012) [71]). To build good tactics that promote the viability of their services, financial technology innovators and service providers must first understand the processes involved in user adoption. The value of any commercial invention resides in pushing its adoption, hence studying the antecedents of behavioral intention to embrace bitcoin may substantially aid in increasing the rate of adoption. (Wang, Y., et al, (2019) [72]).

(3) TRA (Theory of Reasoned Action):

Theory of Reasoned Action (TRA) is a model developed by Fishben and Ajzen that encapsulates the link between beliefs, attitudes, intentions, and action (F. M. Taib, et al, (2008) [73]). Attitudes and subjective norms are two fundamental variables in TRA. The goal of TRA is to forecast a person's

intention based on one's personal attitude towards conduct, which is reflected in subjective norms. (M. Fishbein, et al, (1975) [74]). in society an individual's general sentiment of favorable or negative judgement of performance is represented by their attitude. Specific behavior (M. Abduh, et al, (2011) [75]). In the meanwhile, the subjective norm is a function of belief that represents an individual's view of the most important thing. Important individuals believe he or she should engage in such action (S. Lada, et al, (2009) [76]).

(4) UTAUT (Unified theory of acceptance and use of technology:

UTAUT model is selected due to its high in variance value of usage intention, an improvement compared to other models (Dwivedi, M. W. (2015) [77]). To determine the drivers of behavioral intention (BI), Researchers in this study used construct mapping analysis (Kapoor, K. K., et al, (2014) [78]). to examine the most prominent endogenous factors in adoption-related studies (Patil, P., et al, (2020) [79]). performance expectancy and effort expectancy, constructs from UTAUT, have been widely applied by research and considered as the most popular antecedent of behavioral intention (Merhi, M., et al, (2019) [80]). Furthermore, constructs like facilitating conditions and social influence have investigated at rarer instances (Alalwan, A. A., et al, (2018) [81]). Similarly, constructs such as price value and hedonic motivation (HM) are studied but rarely (Brick, K., et al, (2015) [82]). Apart from the constructs incorporated from the aforementioned theories and models, past researchers have also embraced various other constructs, such as personal innovativeness, perceived risk, and trust.

(5) UTAUT2:

The existing study's proposed model is grounded on UTAUT2. Also, the researcher extended the UTAUT2 model by including both personal innovativeness and trust in the proposed model (Phonthanukitithaworn, C., et al, (2015) - Slade, E. L., et al, (2015) [83-84]). The model is based on UTAUT2. In addition, the researcher expanded the UTAUT2 model by incorporating personal innovativeness as well as trust in the model (Al-Amri, R., et al, (2019)- Omane-Adjepong, M., et al, (2020) [85-86]). These new variables are thought necessary particularly the inclusion of trust in the model principally in the context of cryptocurrencies laden with worries about insecurity, danger, and anonymity (Agarwal, R., et al, (1998) [87]). reflecting its sheer necessity and relevance. Moreover, researchers have averred those personal innovations as a construct, should be included in the studies on the basis that people (Moon, Y., et al, (2018)- Khan, I. U., et al, (2017) [88-89]), who are more innovative are more inclined to take risks in regards to adopting new and novel technology (Kim, S. Y., et al, (2018)- Makanyeza, C., et al, (2018) [90-91]).

Table 4: Theories supporting Behavioral intention for cryptocurrency usage

S. No	Reference	Theory USED	Variables	Outcome variables
1	Davis, F. D. (1989) [64].	TAM (Technology acceptance Model)	Perceived usefulness, Intention to use and perceived ease of use	Computer usage
2	Tao, D. (2009) [92].	TAM	Behavioural intention, Perceived ease of use, Perceived usefulness the quality of the information and System quality	Behaviour Intention & Actual Behaviour
3	Venkatesh, V., et al, (2000) [67].	TAM 2	Subjective norm, voluntariness experience, perceived ease of use, Perceived usefulness.	Intention to use & Usage Behaviour
4	Ajzen, I. (1991) [93].	TPB (The theory of planned behaviour)	Attitude toward behaviour, Perceived behavioural control and Subjective norm.	Intention & Behaviour
5	Gazali, H. M., et al,	TRA (Theory of	Financial Risk, Social Norm, Attitude Perceived Benefit and Tolerance.	Intention

	(2018) [94].	reasoned action)		
6	Williams, M. D, et al, (2015) [95].	UTAUT (unified theory of acceptance and use of technology)	Social influence, Performance expectancy, Facilitating conditions, Effort expectancy, Voluntariness of use, gender, age and Experience	Behavioural intention & Use behaviour
7	Venkatesh, V., et al. (2012) [96].	UTAUT 2	Performance expectancy, Effort expectancy, social influence, Facilitating conditions, Hedonic motivation, Price value, Habit gender, age, Experience	Behavioural intention & Use behaviour

9. REVIEW ON CONCEPTUAL FRAMEWORKS :

Conceptual framework of the study enlightens the relationship between different variables. A brief study on different conceptual frameworks available from different scholarly articles available relating to behavioral intention of cryptocurrency investments to understand different models (Gazali, H. M., et al, (2018) [94]).

Table 5: Details of studies on conceptual framework

Authors	Year	Contribution/outcome	Type of study
Folkinshteyn, D., et al. [97].	2016	The TAM's efficiency in examining elements of new technology lays the path for future investigation of the evolution of Cryptocurrency and similar blockchain technologies.	Conceptual
Mazambani, L., et al. [98].	**2019**	The study's findings highlight behaviour modification tactics that practitioners or policymakers might employ to promote adoption by using predictive behavioural economics models to analyze consumer behaviour.	Conceptual
Mendoza-Tello, J. C., et al. [99].	**2019**	Examine the impact of cryptocurrencies' disruptive innovation on user acceptability and confidence in e-commerce monetary transactions. The technological acceptance model, trust, and perceived risk are used to define a model in this research. Making use of the TAM model.	Conceptual
Sun, W., et al. [100].	**2020**	Individual investors are drawn to crypto-currency not only because of the high projected return, but also because of the important knowledge and risks given by crypto-currency market authorities and distributors.	Conceptual
Alqaryouti, O., et al. [101].	**2019**	Cryptocurrency usage is determined by the perceived advantage of the users, and primarily two particular elements such as users' The study looked at perceived ease of use and perceived advantages, and found a link between the two.	Conceptual

10. DESIRED STATUS :

(1) The study can help researchers better understand how investors intend to use cryptocurrencies. Users' techniques can be learned by investors in the bitcoin market. The current study evaluates bitcoin users' behavioural intentions.

(2) Given the widespread interest in cryptocurrencies and the public and private investment in them, an understanding of the drivers of cryptocurrency investors' adoption of crypto currency has become a critical component of this research.

(3) The goal of the study was to learn more about the factors that influence behavioural intentions and cryptocurrency usage in order to better understand future business models and service strategies for increased adoption, as well as to provide information to policymakers and incumbent institutions on how they are responding to cryptocurrencies.

11. RESEARCH GAP :

(1) Cryptocurrency is an emerging concept therefore a few western scholars have made an attempt to understand the behavioral intention of the consumers.
(2) In the context of the Indian scenario, In-depth studies in relation to understanding the driving factors, Behavioral Intention and Post usage of cryptocurrency is limited.
(3) Therefore, the present study attempts to employ a cross-sectional analysis to study behavioural intention of cryptocurrency investors with the adoption of UTAUT2 model for future research study.

12. RESEARCH AGENDAS :

(1) Cryptocurrency investors' technological acceptance: Blockchain technology is a transaction processing and record-keeping mechanism for electronic transactions. This enables various individuals who are ordinarily directly linked to the network to follow data through a secure network, reducing all forms of security threats and third-party confirmations. (Bhuvana, R., et al., (2020) [102-103]- Bhuvana, R., (2020) [102-103]). Blockchain guarantees that the history of every digital asset is visible and unchangeable by combining decentralization and cryptographic hashing (P. S. Aithal (2020) [104]).
(2) Investors behavioral intention: Investment behaviour has been intensively investigated in a number of sectors, with a focus on a wide range of investment assets. (Ali, A. (2011), p. 105.) Investors will only invest in items that they believe will be profitable and have a high return potential (Ayedh, A., et al, (2020) [106]).
(3) Identification of Key Crypto Investor Determinants: Because Cryptocurrency leverages Blockchain technology, which is still regarded as a breakthrough in computer science, and is difficult for many people to learn and use (Meera, A. K. M. (2018) [107]), usability is critical. There are several characteristics that play an essential role in shaping cryptocurrency investors' behavioural intentions, including as volatility, trust, performance expectancy, facilitating circumstances (FC), cryptocurrency acceptance, and intention to use (Miraz, M. H., et al, (2022) [108]).
(4) To choose a suitable theory to build A conceptual framework for further study: In TRA, two basic factors are attitudes and subjective norms. The goal of TRA is to foresee a person's intention based on their behaviour. The former reflects social subjective norms, while the latter reflects one's own character in connection to behaviour. (Abduh, M., et al., 2011; Lada, S., et al., 2009 [109-110]). There are several theories that may be used to analyze the BI of cryptocurrency users UTAUT and UTAUT2 (Hasan, S. Z., et al, (2022)- Nurhayani, U., et al, (2022) [111] TPB [112]).

13. ANALYSIS OF BEHAVIOURAL INTENTION OF CRYPTOCURRENCY USERS :

A technique for analysing efficacy is an ABCD framework (Advantages, Benefits, Constructs, and Disadvantages). It is a simple to understand strategy that comprises recognising many determining challenges and benefits. (Aithal, P. S., et al, (2015) [113-114]; Aithal, P. S., et al, (2016) [113-114]).

Table 6: Analysis of cryptocurrency using ABCD Framework:

Constructs	Features	Reference
Advantages	(1) The authors believe that the three most essential advantages of cryptocurrencies are privacy, secrecy, and anonymity. (2) Transactions are processed swiftly. The ability to send money to anyone, anywhere in the globe, within minutes of the payment being completed via the BTC network.	Bailis, P., et al, (2017) [115].
Benefits	(1) Due to the security feature, duplicating a cryptocurrency is difficult. (2) Cryptocurrencies use public and private keys for security, making it easier to transfer payments between	Ivashchenko, A. I. (2016) [116].

	two participants in a transaction.	
Constructs	(1) Consumers are frequently misled, making it difficult for bitcoin enterprises to negotiate the hazy regulatory landscape. (2) Cryptocurrency is a game-changing technology. While this technology has great promise, it also has several downsides, such as misdirected investments and illegal usage.	Alkadri, S. (2018). [117].
Disadvantages	(1) There are major risks to Investing in cryptocurrency is something to think about for the medium and long term. (2) High volatility - practically all of the ups and downs in the BTC value can be linked back to various governments' public statements.	Bunjaku, F., (2017) [118].

14. FURTHER RESEARCH PROPOSAL :

(1) Because bitcoin is based on blockchain technology [119-122], technological adoption among cryptocurrency investors must be examined.
(2) In order to analyse investors' attitudes about cryptocurrency use, a framework based on several variables must be developed.
(3) The Indian government has announced that it will create a new digital currency under CBDC that will use blockchain and other related technologies, expanding the market for cryptocurrencies in India.
(4) It is estimated that India has approximately 10 crore cryptocurrency users, making it the world's largest.

15. RESEARCH PROBLEM FOR FURTHER RESEARCH :

The purpose of this research is to learn about the behavioural intentions of cryptocurrency investors in India utilizing academic publications. Because the majority of the investors were from other countries, there were few or no studies undertaken in India, which is the main problem statement of the study.
The objectives proposed for future study are as follows:
(1) To understand the concept and relevancy of cryptocurrency in present Scenario.
(2) To evaluate the Behavioural intention of consumers towards cryptocurrencies.
(3) To explore the key critical factors responsible for influencing the behavioural intention of cryptocurrency investors.
(4) To identify any shortcomings of the technology that may hinder the adoption process and to explore suggested solutions provided by research participants as viable adoption mechanisms.

16. SUGGESTIONS TO CARRYOUT FURTHER RESEARCH :

Based on the aforementioned study of present state, observed research gaps, and assessments of indicated research agendas, the following recommendations are generated:
(1) Cryptocurrency has raised awareness and encouraged investment in it; there are many crypto investors in India who have put more than 10,000 crores of money into cryptocurrencies.
(2) Because of its unchangeable distributed nature, Blockchain, the underlying technology, has helped cryptocurrency consumers trust cryptocurrencies.
(3) Cryptocurrency is unique from other digital currencies in that it is not centrally managed and is more volatile than traditional currencies.
(4) Because the majority of investors are between the ages of 25 and 35, they find the technology to be simpler and more approachable.
(5) Because bitcoin investors are located all over the world, investing behavior varies from one region to the next, as do the variables driving cryptocurrency adoption.
(6) Herding behavior is a notion that raises investor risk while also making ineffective & limiting the chance of Diversification has advantages since it reduces the importance of individual traders and their performance.

(7) Investing in cryptocurrency brings with it some unpredictability, such as price volatility, but millennials are willing to accept any risk.
(8) Understanding of the technology plays an important part in cryptocurrency adoption and has a positive influence on cryptocurrency users' opinions.
(9) Various theories influence behavioral intentions, including TAM (Technology Acceptance Model), TPB (Theory of Planned Behavior), TRA (Theory of Reasoned Action), UTAUT (Unified Theory of Acceptance and Use of Technology), and UTAUT2 (Unified Theory of Acceptance and Use of Technology), with the UTAUT2 model being more relevant for future research.

17. LIMITATIONS OF THE PROPOSAL :

(1) Using behavioural theories, the investigation is limited to cryptocurrency investors' behavioural intentions.
(2) While the Indian government is exhibiting an interest in cryptocurrencies and blockchain technology in order to develop a digital currency foundation, it's yet to issue its own rules; yet, this study examines many aspects linked to cryptocurrency investors' behavioural intentions.

18. CONCLUSION :

Cryptocurrency allows value to be moved online without the use of an intermediary such as a bank or payment processor, allowing value to be transferred internationally, almost quickly, and for low fees, 24 hours a day, seven days a week. Investors in cryptocurrencies are motivated by a variety of variables. This study is significant because it offers a thorough examination of the literature on investors' behavioral intentions regarding cryptocurrency use. The study conducted a systematic analysis of several scholarly articles with the goal of determining the elements that influence investors' behavioural intentions towards cryptocurrency adoption. Many key attributes connected with investor behavioural intention have been investigated, but further research is needed. The literature study revealed that this work has a theoretical foundation and adds to the body of knowledge and to the current research.

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