

Role of AI and IT's Influence in Cryptocurrency Decision

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Abstract - Artificial intelligence (AI) is increasing as an important technological force in the rapidly evolving crypto currency market, influencing the way investors analyze information and make investment decisions. It influence how investors collect information, analyze markets trends, assess risks, and make investment decisions. This study examines the role of AI and its influence on cryptocurrency decision-making, with particular emphasis on the ways AI-driven tools can support investment analysis, prediction, risk management, and trading strategies. The study also considers the influence of AI on investor confidence, decision-making speed, perceived accuracy, and willingness to invest in cryptocurrency. These technologies can assist investors in identifying potential opportunities and risks, thereby supporting faster and more informed decisions. The study also examines how the use of AI may influence investor's confidence, trust, decision-making ability, and willingness to invest in cryptocurrencies. Although AI can improve the efficiency and accuracy of financial analysis, it does not eliminate the uncertainty associated with crypto currency markets. Overall, the integration of AI into crypto currency markets represents a significant development that can enhance decision-making while requiring careful evaluation, human judgement, and responsible use of technology.

Key Words: Artificial Intelligence (AI) - Cryptocurrency - Investment decision-making - Risk assessment - AI-Driven investment.

1. INTRODUCTION

Cryptocurrency has become a digital investment choice especially for young people who love technology. The fast rise of platforms like Instagram, YouTube, X and Telegram has turned media into a key source for news about cryptocurrency markets. College students are seeing cryptocurrency news market updates, opinions, influencer tips and chats on these platforms. Unlike money news social media gives information right away and lets users talk with other investors and creators. This exposure can shape how college students view cryptocurrency, judge investment chances and decide where to put their money. Things such as how social media exposure a college student has, how trustworthy an influencer looks, electronic word of mouth and fear of missing out can change a

college student's investment plans, confidence, how often they invest and how much they invest. At the time the reliability of information on social media can be shaky which may make a college student invest without enough knowledge or let emotions drive the choice. Points out the main social media factors that drive their investment behavior. Also social media is very interactive so information moves fast between people. Electronic word-of-mouth can change how students think through reviews, comments, talks and the real stories that other investors share. At the time the fear of missing out might push students to invest when they see other people making money or talking about how fast cryptocurrency prices are going up. These things might change more than if students decide to invest. These things can change how often students invest how much money students invest and how sure students feel about their choices. Because of this looking at these media factors can help us really understand the cryptocurrency investment habits of college students. This study looks at how social media exposure, influencer credibility, electronic word-of-mouth and fear of missing out affect cryptocurrency investment decisions, among college students.

2. REVIEW OF LITREATURE:

Rahyuda, Reina and Candradewi (2023) examined the determinants of cryptocurrency investment decisions among students in Bali, Indonesia, with particular emphasis on financial literacy, perceived risk and herding behaviour. The study was motivated by the increasing participation of young people and students in cryptocurrency investment, where the potential for high returns is accompanied by considerable uncertainty and volatility. The researchers aimed to determine how financial literacy, risk perception and herding behaviour influence students' cryptocurrency investment decisions. The study addressed the need for greater understanding of informed investment behaviour among students in the emerging cryptocurrency market. The study further indicated that perceived risk and herding behaviour partially mediated the influence of financial literacy on investment decisions. The researchers concluded that improving financial literacy among students can help reduce behavioural biases and support more rational cryptocurrency investment decisions.

Yavana Rani S. and Prerana M. (2021) Investigated the influence of social media on investment decisions among young

adults in India. The study focused on how social media platforms have become an important source of financial information and how investment-related content can influence young investors' awareness, attitudes and decision-making. The researchers aimed to identify the preferred investment options among young adults, examine their level of financial awareness and determine whether social media content provides useful or misleading information for investment decisions. The variables included social media content, social media influence and investor behaviour, while investment decision was considered the dependent variable.

Kevinia Mayumi Amran, FajriAdrianto and MasyhuriHamidi (2024) They explored the influence of digital literacy, financial literacy and social media on cryptocurrency investment decisions among Millennials and Generation Z investors. The study recognized that digital technology has significantly changed the way young investors obtain financial information and make investment decisions, particularly in relation to cryptocurrencies. A quantitative approach was adopted, and purposive sampling was used to collect responses from 125 Millennials and Generation Z investors. The data were analysed using SmartPLS 4.0 and Structural Equation Modelling.

Alif Lam Ra and Rayna Kartika (2026) examined the factors affecting university students' intention to invest in cryptocurrency as a digital investment instrument. The study focused on the increasing popularity of cryptocurrency among young Indonesian investors and particularly among university students. The researchers aimed to investigate whether return expectations, perceived risk, influencers, ease of use and gender affect students' cryptocurrency investment intentions and whether investment knowledge plays a mediating role in these relationships. A quantitative research approach was adopted, and questionnaire data were collected from 702 Indonesian economics students using purposive sampling. Structural Equation Modelling through Partial Least Squares was used to analyse the relationships among the variables. Investment intention was treated as the dependent variable, while return, risk, influencer influence, ease of use and gender were independent variables, with investment knowledge acting as an important mediating factor.

Vishrut Ashish (2022) investigated the impact of COVID-19 on investment education and investment behaviour among Indian undergraduate students, with particular attention to cryptocurrencies and stock-market investments. The study examined how the pandemic changed students' investment learning patterns and participation in financial markets and considered the influence of social media, peers, digital platforms and other factors on investment decisions. The researchers aimed to identify changes in investment education during COVID-19, examine the influence of social media and peer groups, investigate gender differences and determine the factors affecting students' investment decisions. A cross-sectional questionnaire-based study was conducted among 142 undergraduate students, and the data were analysed using descriptive statistics and a Random Forest Classifier. The main variables included social media or digital content, peer influence, parental objection and ease of trading through applications. The findings showed that COVID-19 increased Demat account openings and encouraged students to invest using their savings.

Tamanna choithani, Asmita chowdury, Shriya patel, Poojan patel, Dhal patel and Manan shah (2024) In recent years cryptocurrencies are emerging as a prime digital currency as an important asset and financial system is also emerging as an important aspect. To reduce the risk of investment and to predict price, trend, portfolio construction, and fraud detection some Artificial Intelligence techniques are required. The Paper discusses recent research in the field of AI techniques for cryptocurrency and Bitcoin which is the most popular cryptocurrency. AI and ML techniques such as SVM, ANN, LSTM, GRU, and much other related research work with cryptocurrency and Bitcoin have been reviewed and most relevant studies are discussed in the paper. The main goal of this research has been investigating certain impacts of artificial intelligence in this contemporary world.

Tran Le Nguye, Van Kien Pham (2025) Cryptocurrencies have become mainstream financial instruments, yet adoption remains uneven in emerging markets such as Vietnam, where rapid digitalization and regulatory uncertainty shape user behavior. Existing studies either use behavioral models that offer theoretical clarity but assume linear effects, or machine learning models that capture complexity but lack interpretability. This study combines behavioral theory with explainable artificial intelligence to examine cryptocurrency adoption in Vietnam using survey data from 1,039 respondents. Ten supervised learning algorithms were tested through repeated cross validation, and Random Forest delivered the highest accuracy. SHapley Additive exPlanations were used to interpret model outputs. Results show that trust, perceived usefulness, behavioral control, and financial literacy are key predictors, while perceived risk follows a curvilinear pattern.

Georgiana-Iulia Lazea, Cristian Lungu, Ovidiu-Constantin Bunget (2026) This article examines the revolutionary impact of Artificial Intelligence (AI) on transforming cryptocurrency trading, a sector characterised by extreme volatility, dynamism, and nonlinear data. Through a rigorous bibliometric analysis based on the Web of Science database, this study examines a sample of 555 scientific papers published between 2016 and 2025, utilising the PRISMA protocol for systematic selection, and tools such as VOSviewer and MS Excel. The analysis identifies five major thematic cluster blockchain infrastructure and AI integration in decentralised ecosystems, data analysis and practical applicability in crypto markets, financial and social data analysis—machine learning algorithms, algorithmic trading and automation, and prediction and modelling of crypto market developments.

Samuel Koehler, Niravkumar Dhameliya, Bhavik Patel, Sunil Kumar Reddy Anumandla (2018) This study aims to understand better how to use AI-enhanced bitcoin trading algorithms in the dynamic and turbulent cryptocurrency market to optimize investing strategies. The primary goals are to determine future trends and policy implications, assess the impact on investment strategies and risk management, and investigate the efficacy of AI techniques. Methodologically, a thorough analysis of the body of research on AI enhanced trading algorithms is carried out, emphasizing machine learning, deep learning, and natural language processing approaches. Important discoveries demonstrate how AI can improve automation, efficiency, and decision-making in bitcoin trading.

Giuseppe Modaffari , Maria Frasca , David Barilla (2026) The innovative crypto-world represents one of the most prominent manifestations of volatile, uncertain, complex and ambiguous (VUCA) environments. In this context, the use of technology plays a fundamental role in ensuring the survival of firms operating within the business environment. Recently, the cryptocurrency derivatives market reached a monthly trading volume of \$1.33 trillion, exceeding traditional spot markets and creating unprecedented challenges for digital asset exchanges in managing investment decisions.

Kaushik Mitra, Aparajita Sanyal, Dragan Pamucar, Vladimir Simic, Sanjib Biswas and Ambar Dutta (2026) This study addresses the growing importance of cryptocurrency (CC) as a financial asset and its increasing popularity as an investment option. Given the rapid expansion of research in this field, the main objective is to systematically synthesize the existing literature on cryptocurrency investment and decision-making, focusing on its intellectual structure, dominant themes, theoretical foundations, and emerging research trends. To achieve this, a hybrid review framework is employed, combining a theory-based systematic literature review with bibliometric analysis, following PRISMA guidelines. The analysis covers 1,184 articles indexed in Scopus and published between 2015 and 2025. Additionally, the study integrates the TCCMR, ADO, and PICO frameworks to provide a comprehensive, multidimensional evaluation of the selected body of literature.

Rasoul Amirzadeh, Asef Nazari and Dhananjay Thiruvady (2022) The total capital in cryptocurrency markets is around two trillion dollars in 2022, which is almost the same as Apple's market capitalisation at the same time. Increasingly, cryptocurrencies have become established in financial markets with an enormous number of transactions and trades happening every day. Similar to other financial systems, price prediction is one of the main challenges in cryptocurrency trading. Therefore, the application of artificial intelligence, as one of the tools of prediction, has emerged as a recently popular subject of investigation in the cryptocurrency domain. Since machine learning models, as opposed to traditional financial models, demonstrate satisfactory performance in quantitative finance, they seem ideal for coping with the price prediction problem in the complex and volatile cryptocurrency market.

Timotej Jagrič, Davor Luetić, Damijan Mumel, Aljaž Herman (2000) This study explores the characteristics of individual investors in crypto asset markets using machine learning and explainable artificial intelligence (XAI) methods. The primary objective was to identify the most effective model for predicting the likelihood of an individual investing in crypto assets in the future based on demographic, behavioral, and financial factors. Data were collected through an online questionnaire distributed via social media and personal networks, yielding a limited but informative sample. Among the tested models, Efficient Linear SVM and Kernel Naïve Bayes emerged as the most optimal, balancing accuracy and interpretability. XAI techniques, including SHAP and Partial Dependence Plots, revealed that crypto understanding, perceived crypto risks, and perceived crypto benefits were the most influential factors.

Tang My Sang (2026) Cryptocurrency markets are characterized by high volatility and behavioral biases. Although

several studies have examined psychological, social, and technological factors separately, few have comprehensively integrated them within a unified framework based on behavioral finance. This study addresses this gap by examining the interplay among digital financial literacy, impulsivity, social media financial influencers, fintech self-efficacy, and attitude toward investment in shaping investment decisions in Vietnam's cryptocurrency market. Data were collected from 505 individual investors, and partial least squares structural equation modeling was employed to test the proposed framework. The results indicate that digital financial literacy fosters positive attitudes toward investment and directly supports informed investment decision-making.

Pradip Padhye (2024) Global recognition of the developing cryptocurrency market is growing. Policymakers, institutional investors and individual investors are now all very interested in it. In contrast to more conventional methods, the new encrypted blockchain technology gives individual investors modern investment alternatives. The unstable market, on the other hand, causes instability and uncertainty for market participants, leaving a research void for academics to look into what causes these challenges. The purpose of this research is to look into how the growth of cryptocurrencies has affected investor decision-making and the economy. The study employed a method that was quantitative and used a Likert-scale instrument to collect data via an online questionnaire. With the assistance of the software programs SPSS and AMOS, the data were interpreted and evaluated using an SEM analysis. The research exposed was satisfactorily addressed, and the findings supported earlier literary works. The result shows that social influence, perceived risk and profitability impact the crypto decision-making process except for subjective norms.

While many studies have looked at how social media affects how regular people invest money there is not research that focuses specifically on how college students who invest in cryptocurrency are influenced. This group has levels of knowledge about money different ways of handling risk and different amounts of money to spend. Current studies often treat media as one big thing without looking at how different platforms like TikTok, Twitter/X, Reddit and Telegram might have different effects. They also don't pay attention to how trustworthy the people who give financial advice on social media are. Most of the studies use surveys that ask about what people plan to do not what they actually do. They also don't look much at things that might affect how people invest, like how much they know about money. What happens when they make a bad investment. This gap shows that more research is needed that looks at situations follows people over time and considers different platforms.

Despite growing literature on AI in cryptocurrency markets, most studies treat behavioral, technological, and regulatory factors in isolation rather than as an integrated framework explaining investor decisions. Existing work on AI-driven trading often ignores real-world frictions like fees, slippage, and liquidity, producing overly optimistic results. Few studies examine investor trust, over-reliance, or conflict between human judgment and AI recommendations, especially across different literacy levels and cultures. Additionally, there is limited research on accountability, algorithmic bias, and cross-country regulatory differences shaping AI's influence on cryptocurrency investment behavior. Moreover, few studies

explore explainability of AI models, investor accountability when AI advice leads to losses, or how emerging-market and institutional investors differ from retail investors in adopting AI tools. This leaves a gap in understanding AI's holistic, real-world impact on cryptocurrency decision-making beyond pure algorithmic accuracy.

3. RESEARCH QUESTIONS:

- To what extent does social media exposure influence college students' cryptocurrency investment decisions?
- Which social media platforms (e.g., TikTok, Twitter/X, Reddit, Telegram) have the greatest influence on students' crypto investment choices?
- How does the credibility of crypto influencers ("influencers") affect students' trust and subsequent investment decisions?

4. OBJECTIVES OF THE STUDY

- To determine the extent to which social media exposure influences college students' cryptocurrency investment decisions.
- To identify the social media platforms (e.g., TikTok, Twitter/X, Reddit, Telegram) that most significantly influence students' crypto investment choices.
- To assess the influence of crypto influencer ("influencer") credibility on students' trust and investment decisions.
- To examine the mediating role of financial literacy in the relationship between social media exposure and investment decision-making.
- To investigate the effect of herding behavior (peer/influencer following) on college students' cryptocurrency investment decisions.

5. NEED AND SIGNIFICANCE OF THE STUDY

More and more young people are putting money into cryptocurrency these days. For college students social media is the main place where they learn about cryptocurrency look at different options and decide where to put their money. College students are not like traditional investors. Most college students do not have experience with money they do not have a lot of income and they see so many posts from friends and influencers. This makes college students very likely to make choices just because everyone else is doing it which can lead to losing money and feeling very stressed. Even though this is happening a lot most studies only look at investors instead of looking specifically at college students. We really need to study college students closely. This research is important for reasons. It helps college students think carefully about what they see on media before they spend their money. This research might encourage media sites and influencers to be more honest and responsible with the things they post. It can also help crypto companies find ways to market to people who are influenced by social media. On top of that this study adds to the amount of academic writing we have about how social media changes cryptocurrency investment habits.

6. RESEARCH METHODOLOGY

This study uses a survey based research design to collect primary data from college students who use social media. A sample of 136 students with social media use was chosen by convenience sampling from selected college clusters based on ease of access and willingness to participate. A structured 5 point Likert scale questionnaire was administered through channels. The questionnaire examines six concepts: social media exposure (frequency and reliance on platforms for financial content) influencer credibility, electronic word of mouth fear of missing out investment intention and actual investment decision making behavior toward cryptocurrency. We also recorded demographic variables such as age, gender and year of study along with data on financial instrument preferences and investment amounts. In addition to the questionnaire we used information from existing research papers, news articles and industry reports to support the study. Data were processed with software like SPSS and AMOS performing descriptive statistics, reliability analysis and inferential analyses. In particular the study tested whether the investment intention mediates the relationship, between factors (social media exposure, influencer credibility, electronic word of mouth and fear of missing out) and students' final cryptocurrency investment decisions using Structural Equation Modeling.

7. RESULTS AND DISCUSSION

Table 1: Demographic and Perception Profile (n = 136)

Demographic and Perception Profile	Frequency	Percent
Age		
18-20 Years	39	28.7
21-23 Years	78	57.4
24 Years Above	19	14
Gender		
Male	63	46.3
Female	73	53.7
Year of Study		
1st Year	5	3.7
2nd Year	11	8.1
3rd Year	27	19.9
4th Year	14	10.3
How often do you use social media?		
Less than 1 hour/day	13	9.6
1-3 hours/day	68	50
3-5 hours/day	37	27.2
More than 5 hours/day	18	13.2
How much do you invest in cryptocurrency?		
<Rs.5,000	117	86
Rs.5,001 to Rs.10,000	10	7.4
Rs.10,001 to Rs.15,000	6	4.4
Rs.15,001 to Rs.20,000	1	0.7
>Rs.20,000	2	1.5
Do you believe social media provides reliable information about cryptocurrency?		
Yes	29	21.3
No	42	30.9
Maybe	65	47.8
Expert opinions		
Yes	50	36.8
No	86	63.2
Influencer posts		
Yes	44	32.4
No	92	67.6
News updates		
Yes	42	30.9
No	94	69.1
Advertisements		
Yes	27	19.9

Demographic and Perception Profile	Frequency	Percent
No	109	80.1
Friends' recommendations		
Yes	26	19.1
No	110	80.9
Apps (Instagram, Twitter, Youtube, Etc..)		
Yes	63	46.3
No	73	53.7
What is the main reason you would consider investing in cryptocurrency?		
High return potential	36	26.5
Peer influence	21	15.4
Social media recommendations	26	19.1
Curiosity	18	13.2
Long-term investment	35	25.7

This sample is primarily composed of young college students, particularly those aged 21-23 years. It presents the demographic and descriptive profile of the 136 survey respondents, showing frequency and percentage distributions. Furthermore, the majority of the respondents invest less than ₹5,000 in cryptocurrency. The findings also show that respondents have mixed opinions about the reliability of cryptocurrency information on social media, with 47.8% selecting “maybe”. Among the different types of cryptocurrency-related content, instagram, twitter, YouTube and similar applications have considerable exposure, followed by expert opinions and influencer posts. Finally, high return potential and long-term investment are the major reasons for considering cryptocurrency, while social media recommendations also play a meaningful role.

Table 2: Descriptive Statistics

Items	Descriptive Statistics					Tests of Normality					Reliability Statistics	
	Mean	Std. Deviation	Variance	Skewness	Kurtosis	Kolmogorov-Smirnov ^a	Shapiro-Wilk				Corrected Item-Total Correlation	Cronbach's Alpha
	Statistic	Std. Error	Statistic	Statistic (SE=0.208)	Statistic (SE=0.413)	Statistic (df=136)	Sig.	Statistic (df=136)	Sig.			
SOME1	3.507	0.087	1.018	1.037	-0.469	-0.048	0.215	0.000	0.892	0.000	0.725	0.861
SOME2	3.360	0.083	0.971	0.943	-0.336	0.018	0.201	0.000	0.894	0.000	0.762	
SOME3	3.360	0.098	1.140	1.299	-0.319	-0.420	0.192	0.000	0.898	0.000	0.665	
SOME4	3.331	0.092	1.068	1.142	-0.437	-0.192	0.198	0.000	0.897	0.000	0.687	
INFC1	3.699	0.075	0.872	0.760	-0.527	0.334	0.268	0.000	0.868	0.000	0.681	0.861
INFC2	3.485	0.077	0.894	0.800	-0.176	-0.158	0.214	0.000	0.888	0.000	0.673	
INFC3	3.456	0.085	0.988	0.976	-0.414	-0.119	0.224	0.000	0.895	0.000	0.707	
INFC4	3.566	0.083	0.964	0.929	-0.342	-0.214	0.218	0.000	0.893	0.000	0.774	
EWOM1	3.801	0.078	0.909	0.827	-0.554	0.175	0.248	0.000	0.869	0.000	0.747	0.888
EWOM2	3.654	0.080	0.930	0.865	-0.377	0.076	0.211	0.000	0.879	0.000	0.784	
EWOM3	3.493	0.082	0.958	0.918	-0.209	-0.270	0.204	0.000	0.895	0.000	0.742	
EWOM4	3.588	0.082	0.962	0.925	-0.457	0.293	0.202	0.000	0.876	0.000	0.748	
FOMO1	3.588	0.080	0.931	0.866	-0.094	-0.337	0.236	0.000	0.878	0.000	0.751	0.870
FOMO2	3.500	0.085	0.989	0.978	-0.117	-0.626	0.201	0.000	0.897	0.000	0.665	
FOMO3	3.471	0.089	1.040	1.081	-0.282	-0.397	0.187	0.000	0.902	0.000	0.739	
FOMO4	3.588	0.088	1.029	1.059	-0.220	-0.581	0.202	0.000	0.891	0.000	0.740	
INV1	3.853	0.070	0.821	0.675	-0.046	-0.887	0.211	0.000	0.849	0.000	0.680	0.838
INV2	3.691	0.069	0.803	0.645	-0.165	0.043	0.238	0.000	0.858	0.000	0.648	
INV3	3.787	0.076	0.890	0.791	-0.143	-0.542	0.224	0.000	0.858	0.000	0.717	
INV4	3.794	0.069	0.808	0.654	-0.033	-0.722	0.226	0.000	0.854	0.000	0.639	
INVC1	4.022	0.074	0.865	0.748	-0.671	0.226	0.240	0.000	0.843	0.000	0.728	0.845
INVC2	3.610	0.072	0.845	0.714	-0.503	0.752	0.251	0.000	0.858	0.000	0.616	
INVC3	3.882	0.075	0.878	0.771	-0.590	0.267	0.222	0.000	0.853	0.000	0.732	
INVC4	3.860	0.082	0.952	0.906	-0.709	0.601	0.220	0.000	0.850	0.000	0.653	

a. Lilliefors Significance Correction

Table 3: Reliability

Construct	Cronbach's Alpha
Social Media Exposure	0.861
Influencer Credibility	0.861
Electronic Word-of-Mouth	0.888
FOMO	0.870
Investment Intention	0.838
Investment Decision	0.845

The descriptive statistics results clearly shows that the individual items generally range from approximately 3.33 to 4.02, indicating a moderate to relatively high level of agreement by young investors in crypto currency using FinTech. The result such as, Social Media Exposure variables items have means between 3.33 and 3.51, Influencer Credibility variables items ranges from 3.46 to 3.70, e-WOM variables items ranges from 3.49 to 3.80, FOMO variables items ranges from 3.47 to 3.59, Investment Intention variables items ranges from 3.69 to 3.85 and finally, Investment Decision variables ranges from 3.61 to 4.02. It indicates that all social – media related factors plays vital role in Cryptocurrency investment but their way to make it into effort differs. In addition, the Shapiro-Wilk significance values are below 0.05 for the items, indicating that the individual item distributions do not strictly follow a normal distribution.

The highest reliability is for Electronic Word-of-Mouth is 0.888, while the lowest is for Investment Intention is 0.838. Both are still considered strong. The corrected items total correlations are generally above 0.60, indicating that the individual items contribute adequately to their respective constructs. This suggests that there is no obvious weak item requiring removal based solely on this measure.

Structural Equation Model – Direct and Indirect Path Analysis

Table 4: SEM Results

Path	Estimate	S.E.	C.R.	P	Label
Investment Influenced by Intention Electronic WoM	0.313	0.09	2.909	0.004	Significant
Investment Influenced by Fear of Missing Out	0.218	0.069	2.537	0.011	Significant
Investment Influenced by Social Media Exposure	0.182	0.074	1.906	0.057	Not Significant
Investment Influenced by Influencer Credibility	0.068	0.087	0.679	0.497	Not Significant
Investment Influenced by Social Media Exposure	0.197	0.07	2.348	0.019	Significant
Investment Influenced by Investment Intention	0.532	0.08	7.144	***	Significant
Investment Influenced by Influencer Credibility	0.1	0.077	1.223	0.21	Not Significant
Model fit summary					
CMIN/df = 1.962/2 = 0.981; P = 0.375; SRMR = 0.008; GFI = 0.995; AGFI = 0.950; NFI = 0.996; CFI = 1.000; TLI = 1.000; RMSEA = 0.001; P-CLOSE = 0.489					

Table 5: Standardized Total Effects (Group number 1 - Default model)

	Influencer Credibility	Fear of Missing Out	Electronic WoM	Social Media Exposure	Investment Intention
Investment intention	0.068	0.218	0.313	0.182	0
Investment decision	0.137	0.116	0.116	0.294	0.532

Table 6: Standardized Direct Effects
(Group number 1 - Default model)

	Influencer Credibility	Fear of Missing Out	Electronic WoM	Social Media Exposure	Investment Intention
Investment intention	0.068	0.218	0.313	0.182	0
Investment decision	0.1	0	0	0.137	0.532

Table 7: Standardized Indirect Effects
(Group number 1 - Default model)

	Influencer Credibility	Fear of Missing Out	Electronic WoM	Social Media Exposure	Investment Intention
Investment intention	0	0	0	0	0
Investment decision	0.036	0.116	0.166	0.037	0

The structural equation model direct and indirect path analysis has been applied to understand the investment decision and investment intention effect by the study variables. The test was divided into 3 steps: standardized total effect, standardized direct effect, standardized indirect effect.

Total Effect

The total effect of investment intention shows that Electronic Word-of-mouth has the strongest effect (0.313)

The total effect of investment decision comes from investment intention (0.532) and social media exposure had the second strongest effect (0.294)

Direct Effect

The direct effect of Social Media Exposure on Investment Decision is 0.197, while Investment Intention has a direct effect of 0.532.

The direct effect of Influencer Credibility on Investment Decision is 0.100.

Indirect Effect

The indirect effects demonstrate that Fear of Missing Out variable, Electronic WoM variable, Social Media Exposure variable influence Investment Decision through Investment Intention. Investment Intention plays an important mediating role between some social-media-related factors and Investment Decision.

Fig -1: STRUCTURAL EQUATION MODEL

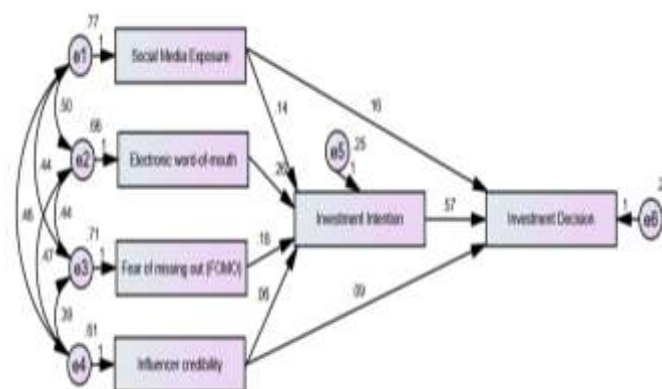


Table 8: Variables Influence on Investment Intention

Relationship	Estimate	P-value	Result
Electronic WoM → Investment Intention	0.313	0.004	Significant
FOMO → Investment Intention	0.218	0.011	Significant
Social Media Exposure → Investment Intention	0.182	0.057	Not Significant
Influencer Credibility → Investment Intention	0.068	0.497	Not Significant

Electronic Word-of-Mouth has the strongest significant effect on Investment Intention, with an estimate of 0.313 and a p-value of 0.004. Since 0.05, the relationship is statistically significant. FOMO also significantly influences Investment Intention, with an estimate of 0.218 and 0.011. However, Social Media Exposure does not significantly influence Investment Intention, because $p = 0.057$, which is slightly above the 0.05 significance level. Similarly, Influencer Credibility does not significantly influence Investment Intention, as $p = 0.497$.

Table 9: Variables Influence on Investment Decision

Relationship	Estimate	P-value	Result
Social Media Exposure → Investment Decision	0.197	0.019	Significant
Investment Intention → Investment Decision	0.532	<0.001	Significant
Influencer Credibility → Investment Decision	0.100	0.221	Not Significant

The strongest relationship in the model is Investment Intention influenced on Investment Decision, with an estimate of 0.532 and a highly significant p-value. This indicates that respondents with stronger investment intentions are more likely to make investment decisions. Social Media Exposure also has a significant positive influence on Investment Decision (0.197, 0.019). Influencer Credibility, however, does not have a statistically significant direct influence on Investment Decision (0.221).

8. IMPLICATIONS AND CONCLUSION

This study extends behavioral finance theory and social influence theory by providing evidence from the cryptocurrency context, thus showing the mediation role of investment intention between social-media-related variables and actual investment. The results show that the assumed role of influencer credibility is limited compared to the role of electronic word of mouth and the fear of missing out. Thus, this study highlights the importance, for virtual communities, of interaction-generated discussion as opposed to one way communication and influencer-related credibility issues.

The results highlight that the fintech companies should focus on creating engagement through peer interactions rather than investing in influencers. Regulators and educators can address the tendency of impulsive decisions caused by informational and social influences of crypto celebrities and FOMO by organizing awareness campaigns. Although students showed a significant level of skepticism towards the information provided by social networks and crypto influencers, this factor strongly influenced their attitude and intentions. The results also suggest that financial literacy programs should not ignore crypto-related assets as irrelevant to students, but instead, explain the level of risk associated with them as many students seem to have little knowledge or understanding of these digital assets.

9. CONCLUSION

Based on the analysis, the paper establishes that the impact of social media data sources on cryptocurrency investment behavior is conditional upon specific mechanisms. The most influential data sources were electronic word of mouth and the fear of missing out, with the former indirectly and directly driving investment intentions. The study also found that intentions were the best predictor of cryptocurrency investment, thus supporting the theory's mediation role. Interestingly, the analysis did not reveal influencer credibility's influence on intentions and decisions, which contradicts some of the earlier theories. Therefore, the research provides a solid foundation for developing strategies targeting college students investing in cryptocurrencies, with an emphasis on leveraging peer recommendations and highlighting the fear of missing out. With all factors considered, the study's results were promising, as evidenced by the model's close fit to the data ($CFI=1.000$; $RMSEA=0.001$). The research added significant value to the existing literature by providing evidence-based insights into how social media data sources influence young people's investment behaviors. In practice, the findings can help cryptocurrency-related fintech companies and policymakers develop effective strategies for engaging this population. Thus, the study's findings contribute to advancing theoretical knowledge while offering practical implications, making it a valuable source for the intended audience.

10. LIMITATIONS

This study was limited by the type of sampling used, which was based on selecting a convenient sample of students rather than a random sample of investors. Also, this study was limited by the design used, which was cross-sectional, therefore, the study could not establish a cause-and-effect relationship between independent and dependent variables.

Another limitation was that the study had a small sample size, and the sample size could be considered too small for a structural equation model analysis, although 136 is sufficient for factor analysis, the results can be biased because the participants responded using Likert scales, which are susceptible to social desirability. Lastly, this study focused only on specific social media constructs, and the researchers did not consider other variables important to social media platforms that might have influenced their results, for example, regulations in place for social media use.

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