Awareness and Attitude Towards Cryptocurrencies in Relation to Adoption among College Students in Lpu-Laguna

Princess Colegio, Jan Ralcel Contreras, Jelsa Anne Escovidal, Win Maw Tun
Bachelor of Science in Management Accounting

ABSTRACT

The purpose of the study is to determine the level of awareness and attitudes of college students at the Lyceum of the Philippines University-Laguna in relation to the adoption of cryptocurrency. Based on the findings of the study, the level of awareness of the college students at LPU-Laguna is at an average level, which implies that they are aware of the specific name of the cryptocurrency platform but lack an in-depth understanding of its information. There are significant differences in attitude towards cryptocurrency in terms of tendency not to take risks, barriers, and motivation when grouped according to demographic profile, specifically in terms of college program. The study claims that there is still skepticism among the respondents as their attitudes are mostly in the neutral phase based on the results, which show a significant relationship between the level of awareness and attitudes in terms of the tendency not to take risks and as motivating factors in terms of investment. The researchers consider the three factors of attitudes to conclude that the institution must address the students' curiosity and interest in this future asset by having a series of webinars. The study will address the students' curiosity and the decision-making of students and future business professionals on the potential benefits of cryptocurrency in the industry.

Keywords: *Cryptocurrency, level of awareness and attitudes, risks, motivation, adoption*

INTRODUCTION

Cryptocurrency is a form of digital payment that users can exchange for goods and services online. The first cryptocurrency was introduced in 2009 through Bitcoin, which is the most popular cryptocurrency up to this date. As the Philippines is one of the largest recipients of crypto remittances globally, many firms are planning to operate a business that can deal with crypto exchanges and have a virtual currency exchange license.

Many Filipinos are interested in cryptocurrency, which makes the country one of the fastest adopters of cryptocurrency in the world. According to the World Economic Forum, the pandemic boosts the crypto-trend, with Filipinos realizing its value as a potential investment and income generator. It is imperative to assess and determine the level of awareness and attitude of students to help and inform them of the possible benefits and downfalls of cryptocurrency.

The study will be beneficial for the institution as it can be a contribution to the CBA Department's activities on capital markets and the potential of cryptocurrency as an asset in the business industry.

The study aims to determine the level of awareness and attitude towards cryptocurrencies by students at the Lyceum of the Philippines University-Laguna. This research will help in obtaining statistical data on the potential variables influencing the degree of success associated with the implementation of new exchange systems.

Review of Literature

In 2021, there is an estimated global crypto ownership rates at an average of 3.9 percent, with over 300 million crypto users worldwide. (Triple A, 2021) In the Philippines, many residents are interested in cryptocurrency, which leads the country to be one of the fastest adopters of cryptocurrency in the world (England, 2021). According to the World Economic Forum, the pandemic boosts the crypto trend, with Filipinos realizing its value as a potential investment and income generator during these hard times. Based on Triple-A data, it is estimated that over 4.3 million people, or 4 percent of the Philippine total population, currently own cryptocurrency. Bitcoin was the gold of the digital money world, while Litecoin was the silver. Litecoin was released in 2011 to compete with Bitcoin. It was also developed to process transactions faster than Bitcoin. At present, Litecoin has a market cap of more than USD 10 billion. With this, the Bangko Sentral ng Pilipinas implemented a platform that protects crypto customers and also encourages bitcoin uptake. However, up to this date, it is still in a developing stage.

Based on the Triple A report, there was a high level of awareness of crypto in the Philippines, with 74% of the total population aware of it. With this, 53% of Filipinos show an interest in investing in cryptocurrencies in the future, while 39% of Filipino crypto owners state that they will use this investment as an asset for their payment options, specifically in online transactions.

According to Ravelas, Filipinos generally pick more traditional investments, such as equities. However, evolving companies are targeting cryptocurrency to raise capital, a process called initial coin offerings. In fact, 7 out of 10 Filipinos have no bank account, so virtual currency gives those consumers a new option for making payments. Filipinos can adapt to this currency source, which is open to anyone and transparent because of its online transaction ledger called the blockchain. Filipino millennials and digital natives, which are part of Generation Z, are changing the investment view with the help of modern technology. As an alternative way of generating additional money, they play games to earn money, using the Axie Infinity as an example. With this, some Filipino families even had this as their source of livelihood during this time of pandemic. (Lagua, 2021)

Numerous college students in Korea have invested their hard-earned money from part-time jobs in cryptocurrencies and have encountered losses and complications. (Ja-young,2021) Based on a survey held from May 17–19, 2021, among 1,750 college students from Alba Heaven, 23.6% were investing in cryptocurrencies. Male students invested at a greater rate (34.4 percent), while female students invested at a lower rate (14.4 percent). When asked why they choose to invest in cryptocurrency, 25.2 percent stated that they do so because they can begin investing with a small amount of money. Regardless of whether they invest in cryptocurrencies or not, 52.9 percent had a positive perception toward them. This is because 33% mentioned a high rate of return on investment, 31% cited a low barrier to entry, and 15.1% stated that this appears to be their final chance to escape financial instability.

Past studies show that cryptocurrency is an asset of the future and that it will significantly change the lives of the world community in terms of investments. The future asset was created to secure information and transact easily without linking to banks, notaries, or various payment systems. However, despite its advantages and potential, cryptocurrency has been associated with numerous problems. Multiple reports state that the level of awareness, attitudes, and adoption of crypto users' needs more attention for financial and investment education. The level of awareness in the Philippines is high, based on the Triple A report, yet it really affects the user's investment decision-making. As a matter of fact, several studies show that attitudes vary from one user to another. It is because demographic factors, including age and sex, also affect how users will decide on this type of investment. Adoption is the resulting variable, and the studies

show that before any intention or actual adoption can occur, it is necessary for the anticipated users to be aware of the presence of an invention. The data and information that have been collected from different studies are from reliable sources to support the research variables of our study.

Conceptual Framework

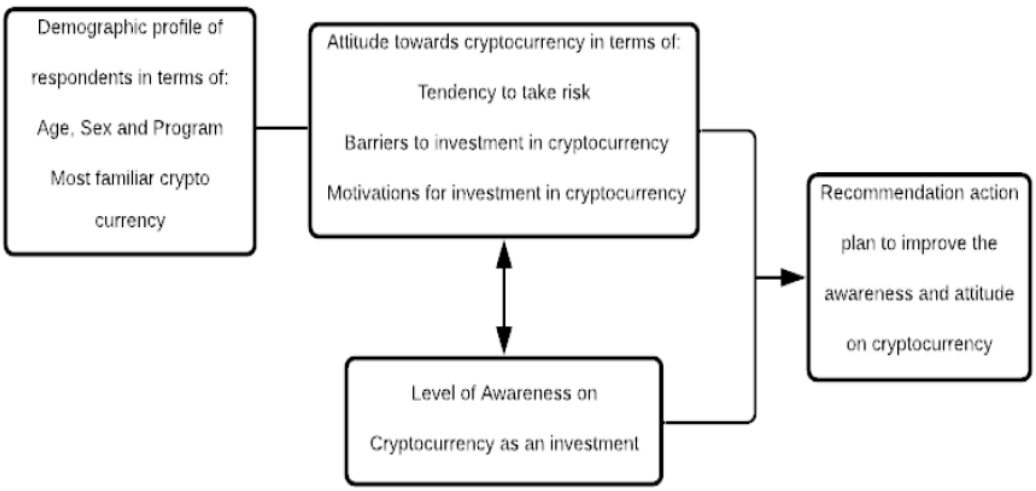

Figure 1. Conceptual framework of the study

Figure 1 shows the conceptualized independent variables, such as the respondents' demographic profile in terms of age, gender, program, and most familiar cryptocurrencies, and dependent variables, such as the respondents' attitudes toward cryptocurrency in terms of their tendency not to take risks, barriers to cryptocurrency investment, motivations for cryptocurrency investment, and level of awareness of cryptocurrency as an investment. The arrow linking the factors represents their substantial association, which is backed by relevant studies and will result in the proposed action plan to enhance bitcoin understanding and attitudes. Furthermore, the study intends to assess whether there is a substantial change in views about cryptocurrencies when groups are divided into demographic profiles.

Objectives of the Study

This study aimed to determine the demographic profile of the respondents from LPU-Laguna college students in terms of age, sex, and program; to identify the most familiar crypto currencies such as Bitcoin, Etherium (Axie Ifinity), and Binance Coin; to determine the level of awareness of cryptocurrencies as an investment; to determine the attitude towards cryptocurrency in terms of: tendency to not take risk; barriers to investment in cryptocurrency; and motivations for investment in cryptocurrency; to determine the significant difference between attitude towards cryptocurrency and when group according to demographic profile; to determine the significant relationship between the level of awareness and attitude toward cryptocurrency;

and to provide a recommendation action plan to improve the awareness and attitude toward cryptocurrency.

METHODOLOGY

The researchers used the quantitative analysis approach to collect the requisite data on cryptocurrency. They also used a descriptive type of methodology, which aims to systematically describe the situation and condition of realistic and full assurance regarding cryptocurrency awareness and attitude in relation to acceptance among Lyceum of the Philippines-Laguna College students. The questionnaire was adapted by the researchers. It was composed of three parts. The first component is to determine the profile of the participants in terms of age, sex, and program. Also, the first component will include an item to identify how respondents perceive the most popular cryptocurrency. The second component of the questionnaire was five questions, which assessed the respondents' level of awareness of cryptocurrency. Lastly, the component of the questionnaire was composed of 21 questions, seven of which assessed respondents' attitudes toward risk, seven of which assessed respondents' attitudes toward barriers, and seven of which assessed respondents' attitudes toward motivation. Second and last-component responses are provided using a four-point Likert scale. The study has a total of 125 participants from different programs. Most of the respondents are female, and they are from the CITHM program, which made a great contribution to this study. Cronbach's alpha was used to measure the strength of internal consistency, and it was also used to test the reliability of the overall questions in achieving research objectives.

RESULTS AND DISCUSSIONS

Table 1 shows that there is a significant difference in attitude towards cryptocurrency when grouped according to program since p-value is less than 0.05. CAM, with a mean of 3.48, has the highest tendency not to take risk when investing in cryptocurrency compared with other programs like CBA, CAS, COECS, and CITHM. The researchers believe that it may be a cause of the behavior and attitudes of Generation Z.

Table 1. Mean Difference Between the Attitude Towards Cryptocurrency in Terms of Tendency not to Take Risk When Grouped According to Demographic Profile

Demographic Profile	Frequency	p-value	Interpretation
Age	0.81	0.449	Not Significant
Sex	1.08	0.300	Not Significant
Program	2.74	0.032	Significant

Notes: Significant if the p-value is less than 0.05 level of significance

Table 2 reveals that when views regarding cryptocurrencies are categorized according to program, there is a statistically significant difference in terms of the obstacles to bitcoin investment, with a degree of significance less than 0.05. According to statistical study, CAM has the largest hurdles to cryptocurrency investment when compared to other programs such as CBA, CAS, COECS, and CITHM. When respondents are separated into gender and age categories, there is no statistically significant difference in their opinions about cryptocurrencies in terms of investment obstacles, since their p-values are both bigger than the 0.05 threshold of significance. This means that there are no statistically significant differences in views toward cryptocurrencies regarding investment restrictions depending on age or gender.

Table 2. Mean Difference Between the Attitude Towards Cryptocurrency in terms of Barriers to Investment in Cryptocurrency when Grouped According To Demographic Profile

Demographic Profile	Frequency	p-value	Interpretation
Age	0.23	0.294	Not Significant
Sex	0.82	0.366	Not Significant
Program	3.30	0.013	Significant

Notes: Significant if the p-value is less than 0.05 level of significance

Table 3 demonstrates that there is a considerable variation in attitudes regarding bitcoin in terms of desire for investment when grouped by program. When categorized by gender and age, there is no substantial variation in sentiments regarding cryptocurrencies in terms of investment incentive. It implies that the majority of respondents, regardless of age or gender, are motivated to invest in the same way. One obvious reason for this phenomena is that, in general, everyone considers investments to be constructive activities that might assist them financially in the long term. People classify investments as future preparation, but how they understand and value a possible investment differs based on their career route.

Table 3. Mean Difference Between the Attitude Towards Cryptocurrency in terms of Motivations for Investments in Cryptocurrency when Grouped According To Demographic Profile

Demographic Profile	Frequency	p-value	Interpretation
Age	0.21	0.808	Not Significant
Sex	0.00	0.979	Not Significant
Program	4.20	0.003	Significant

Notes: Significant if the p-value is less than 0.05 level of significance

Table 4 shows there is a significant relationship between the level of awareness and attitudes towards cryptocurrency in terms of the tendency not to take risk and the motivation for investment with less than 0.05 sig (2-tailed) It is because if students are aware of this phenomenon, it has a direct effect on their attitudes to not take risks or they will have motivation to invest. It subsequently creates an adoption among the respondents as they are aware how it really works. The researchers at LPU-Laguna have established a recommendation and action plan to improve awareness and attitudes towards cryptocurrency among college students. The recommended action plan has four main categories, including the key result areas, objectives, action plan, and person-in-charge. As a result, the researchers offer a series of webinars that cover basic cryptocurrency information in order to improve students' level of awareness and pique their interest in cryptocurrency.

Table 4. Relationship Between the Level of Awareness and the Attitude Towards Cryptocurrency

			Level of Awareness	Tendency not to Take risk	Barriers to Investment	Motvation for Investment
Spearman's rho	Level of Awareness	Correlation Coeeficient	1.000	.240	-.040	.211
		Sig. (2-tailed)		.006	.654	.017
		N	128	128	128	28
		Interpretation		Significant	Not Significant	Significant

*Notes: *.Coorelation is significant at the 0.05 level (2-tailed)*

CONCLUSIONS

There is a significant relationship between the level of awareness and attitudes towards cryptocurrency in terms of the tendency not to take risks and the motivation for investment with less than 0.05 sig (2-tailed). It is because if students are aware of this phenomenon, it has a direct effect on their attitudes to not take risks or their motivation to invest. It subsequently creates adoption among the respondents as they are aware of how it really works. The researchers at LPU-Laguna have established a recommendation and action plan to improve awareness and attitudes towards cryptocurrency among college students. The recommended action plan has four main categories, including the key result areas, objectives, action plan, and person-in-charge. As a result, the researchers offer a series of webinars that cover basic cryptocurrency information in order to improve students' level of awareness and pique their interest in cryptocurrency.

REFERENCES

Alaklabi & Kang (2020) *Perceptions towards Cryptocurrency Adoption: A case of Saudi Arabian Citizens* -. IBIMA
Publishing. Retrieved from https://ibimapublishing.com/articles/JEBS

Alomo (2020). Students Need to Learn About Cryptocurrency in College. Retrieved from
https://www.linkedin.com/pulse/students-need-learn-cryptocurrency-college-fabrice-alomo/2021/110411/

Banerjee, S. (2021, October 8). *Crypto and blockchain is a space where India will make its mark and contribute*
globally, we aim to help build. Business Insider. Retrieved from https://www.businessinsider.in/advertising/brands/article/crypto-and-blockchain-is-a-space-where-india-will-make-its-mark-and-contribute-globally-we-aim-to-help-build-that-ecosystem-ramalingam-subramanian-coindcx/articleshow/86840749.cms

Bevans, R. (2021). *An introduction to the two-way ANOVA*. Scribbr. Retrieved from
https://www.scribbr.com/statistics/two-way-anova/

Bhilawadikar, V. & Garg, E. (2020). Investment attitude of millennials towards cryptocurrencies. Retrieved from
https://www.researchgate.net/publication/343744130_Investment_attitude_of_millennials_towards_cryptocurrencies

Cohen & Wronski (2021). *Cryptocurrency investing has a big gender problem*. CNBC. Retrieved from
https://www.cnbc.com/2021/08/30/cryptocurrency-has-a-big-gender-problem.html

Cryptocurrencies: Curiosity and confusion among consumers. (2019). ING Think. Retrieved from
https://think.ing.com/articles/sizing-up-the-money-revolution-crypto-bitcoin-currencies-digital

Daly (2021). *The No. 1 Reasons Men and Women Give for Avoiding Cryptocurrencies*. The MotleyFool. Retrieved
from https://www.fool.com/the-ascent/cryptocurrency/articles/the-no-1-reasons-men-and-women-give-for-avoiding-cryptocurrencies/

Dellatto, M. (2021). *Crypto's Super User: Young Men. 43% Of U.S. Males Aged 18 To 29 Have Bought The Currency*.
Forbes. https://www.forbes.com/sites/marisadellatto/2021/11/11/cryptos-super-user-young-men-43-of-us-males-aged-18-to-29-have-bought-the-currency/?sh=7217995d349a

Doblas, M. (2019). *Awareness And Attitude Towards Cryptocurrencies In Relation To Adoption Among College*
Students In A Private Tertiary Institution In Cagayan De Oro City, Philippines. Retrieved from https://www.researchgate.net/publication/335881857
England, J. (2021). *Cryptocurrency to become mainstream in the Philippines*. FinTech Magazine. Retrieved from
https://fintechmagazine.com/digital-payments/cryptocurrency-become-mainstream-philippines
Goforth, C. (2015). *Using and Interpreting Cronbach's Alpha | University of Virginia Library Research Data Services*
+ *Sciences*. Retrieved from https://data.library.virginia.edu/using-and-interpreting-cronbachs-alpha/
Hani A.. (2021). *Cryptocurrency Gaining Traction in the Philippines*. OpenGov Asia. Retrieved from
https://opengovasia.com/cryptocurrency-gaining-traction-in-the-philippines/
Jennings, R. (2019). *Why Cryptocurrency Is Gaining in Philippines Despite 2018 Bitcoin Crash*. VOA. Retrieved
from fhttps://www.voanews.com/a/why-cryptocurrency-is-gaining-in-philippines-despite-2018-bitcoin-crash/4873275.html
Lavrakas, P. (2008). Percentage frequency distribution. Encyclopedia of Survey Research Method. Retrieved from
https://methods.sagepub.com/reference/encyclopedia-of-survey-research-methods/n372.xml
Lee (2021). *Asia is leading global crypto adoption among retail investors, with Vietnam, India, and Pakistan seeing*
the highest growth. Retrieved from https://markets.businessinsider.com/news/currencies/asia-global-cryptocurrency-adoption-retail-investors-india-pakistan-vietnam-2021-8
Lim, S. C., Baharudin, A. S., & Low, R. Q. (2017). Factors Influence SMEs in Malaysia to Adopt e-Commerce:
Moderating Roles of Perceived Strategic Value. Journal of Engineering and Applied Sciences, 12(6)
Moneymax (2021). Cryptocurrency in the Philippines: What You Need to Know. Retrieved from
https://www.moneymax.ph/personal-finance/articles/cryptocurrency-philippines
Moran, M. (2021, July 13). *Composite Scoring and Reliability*. Statistics Solutions. Retrieved from https://www.statisticssolutions.com/composite-scoring-and-reliability/
Neil (2021). BSP moves to tighten cryptocurrency regulations to boost industry and market. Retrieved from
https://www.bworldonline.com/bsp-moves-to-tighten-cryptocurrency-regulations-to-boost-industry-market/
Nicolas, B. D. (2021). Filipinos find financial freedom in pandemic with cryptocurrency game | Bernadette D. Nicolas
and Tyrone Jasper C. Piad. BusinessMirror. Retrieved from https://businessmirror.com.ph/2021/11/10/filipinos-find-financial-freedom-in-pandemic-with-cryptocurrency-game/
Nunley, C. (2021). People in the Philippines are earning cryptocurrency during the pandemic by playing a video game.

CNBC. Retrieved from https://www.cnbc.com/2021/05/14/people-in-philippines-earn-cryptocurrency-playing-nft-video-game-axie-infinity.html?fbclid=IwAR3BvW-ys40AoqN9obAVcJtYMLdKER3e4NYhhs7nBUx2T5QnTvGk9c_CVWo

Partz, C (2021) Lack of knowledge is main barrier to crypto adoption, new survey says. Cointelegraph. Retrieved from https://cointelegraph.com/news/lack-of-knowledge-is-main-barrier-to-crypto-adoption-new-survey-says

Patil et al..(2019). Attitude of the millennial generation towards cryptocurrency. Retrieved from https://esource.dbs.ie/handle/10788/3817

Presthus, W., & O'Malley, N. O. (2017). Motivations and Barriers for End-User Adoption of Bitcoin as Digital Currency. Procedia Computer Science, 121, 89-97.

Schuh, S., & Shy, O. (2016). US consumers' adoption and use of Bitcoin and other virtual currencies. *In DeNederlandsche bank, Conference entitled "Retail payments: mapping out of the road head". Google Scholar*

Shukla, S. (2019, April 1). *A Study on The Awareness and Perception Of Cryptocurrency In Bangalore, IJAR - Indian Journal of Applied Research (IJAR), IJAR | World Wide Journals*. Indian Journal of Applied Research. Retrieved from https://www.worldwidejournals.com/indian-journal-of-applied-research-(IJAR)/article/a-study-on-the-awareness-and-perception-of-cryptocurrency-in-bangalore/MTc3Mjk=/?is=1

Smutny, Z. et al. (2021). Motivations, Barriers and Risk-Taking When Investing in Cryptocurrencies. *Mathematics*, *9*(14), 1655. Retrieved from https://doi.org/10.3390/math9141655

Staff, T. C. (2020). *Simple average vs weighted average - definitions, explanations, differences*. Terms compared. Retrieved from https://www.termscompared.com/simple-average-and-weighted-average/

TripleA crypto payment. (2021, October 14). *Global Cryptocurrency Ownership Data 2 021*. TripleA. Retrieved from https://triple-a.io/crypto-ownership/

Tsanidis, C., Nerantzaki, D. M., Karavasilis, G., Vrana, V., & Paschaloudis, D. (2015). Greek consumers and the use of Bitcoin. The Business & Management Review, 6(2), 295-302.

Vega, N. (2021). More than 1 in 3 cryptocurrency investors know little to nothing about it, survey finds. CNBC. Retrieved from https://www.cnbc.com/2021/03/04/survey-finds-one-third-of-crypto-buyers-dont-know-what-theyre-doing.html

Yoon, J. Y.. (2021). *1 in 4 college students investing in Cryptocurrency.* TheKoreaTimes. Retrieved from https://www.koreatimes.co.kr/www/biz/2021/05/175_309361.html

Yusof, A. (2021, July 17). *Call to boost cryptocurrency awareness*. NST Online. Retrieved from https://www.nst.com.my/business/2021/07/709197/call-boost-cryptocurrency-awareness