

Exploring Motivations of Cryptocurrency Enthusiasts

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ABSTRACT Since cryptocurrencies have the potential to be extremely detrimental to society, it is essential to understand the primary motives of the users and the perceptions of non-users. Although there are several studies on the technological and economic aspects of these virtual coins, research on end-user adoption is scarce. Therefore, this study aims to characterize the types of cryptocurrency enthusiasts who invest in digital currencies by exploring their primary motivations. Doing so, we provide an understanding of the current state of scholarly work on end-user adaptation and present valuable insights to practitioners such as digital currency exchange providers and policymakers for better managing the development and adoption of cryptocurrencies. Netnography is used by combining textual network analyses of user-generated hashtags with visual content analyses of posts extracted from Instagram to derive critical word associations and visualize the central themes that are formed around the meaning of the #cryptocurrency hashtag. The preliminary findings suggest three clientele groups: tech-savvy consumers, dreamers, and bettors. Tech-savvy consumers are curious about the technology behind cryptocurrencies and thus follow their technological advances and invest accordingly. Dreamers are optimistic toward virtual currencies and expect the coins to appreciate in value. Their primary motivation is the hope of having a luxurious life and becoming rich. Bettors consider cryptocurrency investment as a form of gambling. They enjoy the adrenaline rush of betting on a fortune, despite the risk of losing due to wild fluctuations in pricing.

Keywords Cryptocurrency, Bitcoin, Virtual currency, Digital money, User motivation

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I. INTRODUCTION

Cryptocurrencies, which are independent and decentralized virtual currencies that can be transferred from peer to peer without any intermediary and with little transaction costs, are gaining popularity worldwide (Schuh and Shy [1]). When cryptocurrencies first appeared in the financial landscape, innovators, multinational corporations, retailers, and financial leaders showed interest in them because of their price and performance expectancy (Yosupov [2]). Although cryptocurrencies are technologically complicated and risky for most consumers due to their volatile exchange rates with sovereign currencies (e.g., the US dollar), many consumers are still optimistic about them and expect the coins will appreciate in value (Roos [3]). Thus, cryptocurrencies, with Bitcoin being the most popular, have attracted considerable investment from ordinary consumers.

Being a relatively new concept, the literature about cryptocurrencies and Bitcoin in particular is scarce. There is limited research about Bitcoin and its functions (Yermack [4]; Narayanan et al. [5]) as well as its international use as a means of investment, gambling, and illegal activities (Athey et al. [6]). Additionally, studies have investigated the differences between alternative cryptocurrencies (Gans and Halaburda [7]); the digital privacy paradox of cryptocurrencies consumers face (Athey et al. [8]); and the changes cryptocurrencies cause in the trading behaviors of investors, trading costs, and welfare (Malinova and Park [9]).

Besides their technological and economic importance, the adoption of cryptocurrencies has non-negligible societal implications including, but not limited to, illegal activities such as purchasing drugs and other contraband, weapons smuggling, insider trading, gambling, money laundering, and bribery. Therefore, since cryptocurrencies changed the global financial system and have the potential to be extremely detrimental to our society, it is essential to understand the primary motives of their users. Apart from research on the technological and economic aspects of cryptocurrencies, little research has been done on end-user adoption. Thus, little is known about ordinary consumers' perceptions of and motivations for buying digital currencies. By investigating consumers' motivations to allocate a remarkable amount of money from their monthly income to purchase different kinds of digital currencies, this study aims to characterize the types of cryptocurrency enthusiasts and provide valuable insights to practitioners such as digital currency exchange providers, bankers, insurers, investors and policymakers.

The rest of the article is organized as follows. In the next section, we review the present literature on cryptocurrencies. We provide brief information about the evolution of money to digital currencies, we show the

difference of cryptocurrencies from fiat currencies, and lastly, we present the previous literature on digital currency end-user adoption. Then, we explain our methodology, sampling, data collection and analysis procedures. The paper follows with three types of cryptocurrency users in findings. We explore the motivations of digital currency buyers on Instagram. We conclude this paper with discussions on theoretical and managerial implications of our findings, limitations of our study, and future research prospects.

II. LITERATURE REVIEW

2.1. Evolution of Money to Cryptocurrencies

In general, when people are asked what comes to their mind when they hear the term “economics” their reply is “money.” In fact, economics is not only about money and existed before money was invented; however, there is a strong connection between money and economics, as money is the instrument used to assign value to goods (Göksel [10]). Money was invented mainly because of difficulties with the barter system (Case, Fair and Oster [11]). Moreover, in economics money is not a resource or a form of capital. To understand the nature of currency, it is important to understand that money is also a good produced by human beings (Göksel [10]).

Money has three main functions in an economy: a medium of exchange, a unit of account, and a store of value. The primary features of cryptocurrencies are as stores of value and mediums of exchange. Unlike in fiat currency¹, the unit of account function is irrelevant in digital currencies because the currency owner can visualize the value in his or her preferred fiat currency (Catalini and Gans [12]).

One milestone in the history of money was the invention of the euro, as it was the first time different nations coordinated to form a single currency at the expense of losing their respective monetary power. Cryptocurrencies are one-step further than that, aiming to be nationless global currencies. According to Tavlas [13], by using international money, people reduce the amount of information they must acquire, and the number of transactions they would make. Money performs a function similar to that of an international language. If just one person speaks a language, then the language has no social value. As the number of people who speak it increases, the language can become a means of communication. Likewise, a currency cannot become a useful unit of account or medium of exchange if only one person uses it. Its utility depends on how many people use it. That is why individuals have an incentive to convince other agents to switch to another currency (Jacobs [14]). Catalini and Gans [12] use this as an example of the network effects and economies of scale that give intermediaries substantial market power. The authors argue that blockchain² technology forms digital platforms in which network effects do not give an intermediary market power. Catalini and Gans [12] define blockchain as “a general purpose technology that can be used to trace scarce digital property rights and create novel types of digital platforms,” and argue that this technology allows users to verify transaction attributes without a third party and prevents information leakage.

Bitcoin and other cryptocurrencies started with a post written to a cryptography mailing list by Satoshi Nakamoto on November 1, 2008. Nakamoto believed in need for an electronic payment system that will use cryptographic proof, rather than trust, as a base so that any two agents can transact with each other without a trusted third-party agent (Nakamoto [15]). Therefore, he proposed a solution to the double spending problem³ in digital currencies that does not require an intermediary or central authority for a transaction (Folkinshteyn et al. [16]).

The primary focus of scholarly work on Bitcoin and cryptocurrencies has been on its technological background, showing how changes in technology can transform transactions and markets in the economy. The costless verification of transaction attributes and the information provided by blockchain technology will not only fundamentally change the design of markets, property rights, and contracts, but also prevent information leakage without the need for a third party (Catalini and Gans [12]).

On the other hand, there are also researchers who are skeptical about Bitcoin technology. Among them, the most famous ones are Nobel Prize-winning economist Paul Krugman [17], who described Bitcoin as “evil”; Nobel Prize-winning economist Joseph Stiglitz, who feels that Bitcoin should be banned; and Stephan Roach, who claims that Bitcoin is a dangerous speculative bubble (Ida [18]). At the same time, countries are divided on their acceptance of Bitcoin. While the head the New York branch of the Federal Reserve, William Dudley, and the head of the French Central Bank, François Villeroy de Galhau, see Bitcoin as a speculative asset, China

¹ Fiat money is the money that is intrinsically worthless. It is designated as money. (Case, Fair and Oster 2009)

² “Each of the blocks contains valid transaction records for a specific period of time and their attributes. A key attribute of each transaction is its time stamp. Blocks are chained together incorporating a digital fingerprint of previous block (a hash) in the current block. Any change in the transaction information contained in a specific block would alter such fingerprint, irreparably breaking the chain of consensus linking that block with all subsequent ones. As a result, one can think of a blockchain not only as a large-scale, distributed database, but also as an immutable audittrail where the DNA of each block is incorporated in all following ones, making it impossible to alter history without being noticed” (Catalini and Gans 2017).

³ Digital currencies have a risk of spending twice because digital information can be reproduced easily.

banned its use in 2017 (Ida [18]). On the other hand, countries like Venezuela, Malaysia, Iran, Australia, and South Korea are in favor of cryptocurrencies, and PwC announced that they would accept Bitcoin as a payment system (Ida [18]).

The technological background of bitcoin has been in focus for some researchers. Folkinshteyn, Lennon, and Reilly [16] compare Bitcoin with the World Wide Web in terms of their formation, technology, and structure. Moreover, their decentralized nature and lack of requirements for licensing fees are similar (Folkinshteyn, Lennon, and Reilly [16]). As “Gopher⁴” existed before the World Wide Web, Bitcoin uses cryptographic algorithms, which were standardized by the US Department of Commerce, invented a decade prior to the formation of Bitcoin, and used by the US government. Catalini and Gans [12] also emphasize how changes in technology change the types of transactions and markets that exist in the economy. Similar to how Twitter created new forms of communication, the costless verification of information blockchain technology provides will fundamentally change the design of markets, property rights, and contracts (Catalini and Gans [12]). Moreover, the system creates more competition at different levels of service, as the entry barriers are low and the system is based on the ability to solve the underlying code. The security of a blockchain depends the computing power used for mining⁵, which creates economies of scale because when more people use cryptocurrencies, their value increases, which then attracts more miners. Although Bitcoin has a decentralized nature, economies of scale in mining caused one mining pool to reach 50% of the network (Catalini and Gans [12]). The cryptocurrency literature has attracted the attention of both economists and information technology researchers; however, there are many questions to be answered by interdisciplinary research.

2.2. Cryptocurrencies versus Fiat Currencies

Fiat currencies are backed by the full faith and credit of the governments that issues them (Redish [19]). Cryptocurrencies, on the other hand, have no legal tender and have a limited supply (Nakamoto [15]). As long as there is a demand for cryptocurrencies, they are deflationary by nature. Some believe that it is not a coincidence that Bitcoin first arrived in 2008 during the global financial crisis caused by the US housing bubble; it was the best time to create money without the intervention of banks (Ida [18]). Being invented during the US housing bubble, it is also important to ask whether Bitcoin itself is characterized by bubbles as well. Cheung, Roca, and Su [20] find a few short-lived bubbles and three huge bubbles between 2011 and 2013. The authors observe that the latest and largest bubble was in 2014, when MT Gox, the largest Bitcoin exchange site was hacked.

According to Portes and Rey [21] if a currency wants to become an international currency, its transaction costs need to be lower than the transaction costs of the domestic currency. Transaction costs decrease when the volume of transactions in that currency is high and exchange rate variability is low. On the other hand, Garganas [22] argues that the willingness of market participants to hold a currency as a store of value is essential, which is highly satisfied by cryptocurrencies.

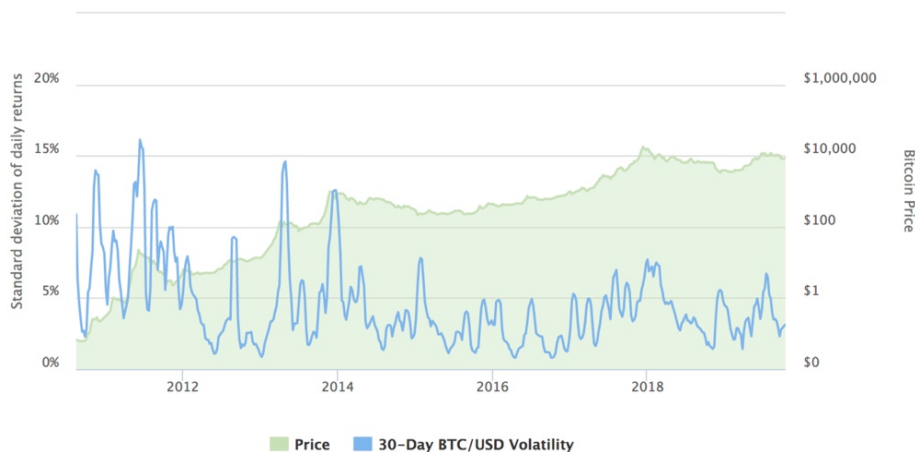


Figure 1. Bitcoin Price and Volatility (Source: The Bitcoin Volatility Index⁶)

⁴ Gopher is a system that allows easy access to text based (plain text) information and menus, and is the general name given to the TCP / IP protocol used by this system.

⁵ The state decides when the paper money is to be printed and distributed. But Bitcoin does not have a central government. At Bitcoin, miners use special software to solve math problems, and a bit of new bitcoin is created as a result.

⁶ <https://www.buybitcoinworldwide.com/volatility-index/>

Figure 1 shows one of the most-mentioned risks of cryptocurrency, which is its price volatility. The value of a single Bitcoin is highly volatile. For instance, one Bitcoin cost \$30 in June 2011, cost \$2 at the end of the same month, cost \$250 in April 2013, cost \$60 in two weeks after that peak, cost \$1,200 in December 2013, and cost \$230 by January 2015. Bitcoin's value is predicted to reach \$40,000 by the end of 2018 (Folkinshteyn et al. [16]). Therefore, considering the volatility of cryptocurrencies, it is essential to ask if bubbles that eventually burst are characteristic of digital currencies.

Bitcoin's five closest competitors are Ethereum (with market value of \$45.5 billion and a price of \$442), Ripple (with market value of \$9.82 billion and a price of \$0.25), Iota (with market value of \$6.75 billion and a price of \$2.43), Dash (with \$6 billion and a price of \$777), and Litecoin (with market value of \$5.47 billion and a price of \$101) (Ida [18]). While it took four years for Bitcoin to reach \$1 billion in market value, Ethereum reached the same market value in only two years (Catalini and Gans [12]).

2.3. Cryptocurrencies and end-user adoption

Although cryptocurrency users and their motivations are well represented in non-academic literature, there are insufficient scholarly studies on consumer adoption. Bohr and Bashir [23] conclude that age, early installation and mining, expenditure on illicit goods, and participating in Bitcoin-specific forums positively affect Bitcoin accumulation. The authors found anonymity, freedom, and lack of trust in the banking system to be the three primary motivators for the Bitcoin user. Likewise, Presthus and O'Molloy [24] conclude that, rather than monetary incentives or external influences, the main motivation of Bitcoin users is technological curiosity. The authors claim that non-users question the benefits and security of Bitcoin and are waiting for more people to use the system before they do so themselves. According to Pakrou and Amir [25], infrastructural, structural, individual, and cultural variables have positive and significant impacts, while innovative, political, and environmental variable do not have any significant effect on the use of Bitcoin.

Schlegel, Zavolokina, and Schwabe [26] aim to provide an overview of how blockchain technology affects consumers rather than focusing on cryptocurrencies. The authors conclude that the largest blockchain impact is expected in innovative products and services because it solves the problem of trust and enables smart contracts. Improved product and service quality is expected to be the second benefit, as blockchain is fast and efficient.

Krombholz et al. [27] try to understand how users interact with Bitcoin, how they manage their virtual assets, and their experiences and perceptions about the network's security, privacy, and anonymity. The authors conclude that many users do not have sufficient knowledge of security measures such as encryption and backups, and their main challenge is managing their Bitcoin assets. Moreover, almost a quarter of the participants in their survey have experienced security problems and have lost Bitcoins as a result.

On the other hand, Meiklejohn et al. [28] reveal that users adopt cryptocurrencies to exchange them with other currencies, purchase and sell drugs and other contraband on web pages such as the Silk Road, launder Bitcoins via services like Bitfog, and transfer their assets to Bitcoin before a divorce. It is apparent that, due to the anonymity that cryptocurrencies provide, they have become a tool for criminals on the "deep internet" (Ida [18]).

Lastly, categorization of digital currency users is a research area that took scholarly attention. For instance, Goldberg and Lewis [29] tried to categorize users according to their views on money and found three types, as well: security collectors, autonomy worshippers, and power grabbers. For the first group, money means security; the second group believes money brings freedom, and last group sees money as power. Similarly, Yelowitz and Wilson [30] analyzed purposes of Bitcoin users using Google Trends data and identified four possible clientele group: computer programming enthusiasts, speculative investors, Libertarians and criminals. Lui [31] surveyed 1133 participants of the online Bitcoin community of owners and non-owners of Bitcoin and identified three key motives: curiosity, profit and political. However, no prior research analyzed how users and non-users of cryptocurrencies reflect their thoughts, feelings, perceptions and motivations on digital currencies to others. For this reason, the particular focus of this paper is on the reflected motivations of digital currency users and perceptions of non-users as they promote it on another digital platform, namely Instagram. Doing so, we contribute to end-user literature of cryptocurrencies using a novel methodology and define what type of people are interested in cryptocurrencies and what their motivations are.

III. METHODOLOGY

A qualitative approach is ideal when investigating how individuals perceive a particular situation (Moustakas [32]). Since this research examines the motivations to buy cryptocurrencies, an empirical study using qualitative research techniques is most appropriate. For the data collection, we employ content analysis through Netnography, which enables us to gain invaluable insights into the phenomenon at hand in a reasonable and time-effective way (Langer and Beckman [33]). Mayring [34] states that content analysis can be performed on various forms of data, including textual, musical, pictorial, or plastic; this study uses textual and visual

content analysis.

Social tagging is useful to categorize and describe content on a social network through user-generated keywords in the form of hashtags (Lin and Chen [35]; Pan et al. [36]). Hashtags are a significant source of data not only for being practical to reach to a large group of like-minded people but also for providing invaluable insights about social interpretation, mental representation, and knowledge structure (Fu et al. [37]; Nam and Kannan [38]).

Instagram, which combines visual and textual content, is selected as the data source because of its ability to provide a broad, diverse group of people with social, economic, and racial diversity as compared to other social networking platforms (Duggan [39]). In addition, Instagram encourages its users to be as specific as possible when describing an image using hashtags by limiting users to 30 tags per photo (Schlesselman-Tarango [40]). Another reason Instagram has been chosen as a data source is its usefulness for exploring user-generated tags associated with images. To this end, this study employs a qualitative inquiry into the textual and visual data ordinary individuals generate on Instagram. The hashtag #cryptocurrency was selected as the starting point to allow for a better understanding of how consumers perceive digital currencies.

As of July 29, 2018, there were 1.896.857 Instagram posts under the hashtag #cryptocurrency. A total of 1,000 posts with #cryptocurrency hashtag are extracted using the Supermetrics Pro add-on for Google Sheets. NodeXL Network Graphing Tool, which is a free add-on to Microsoft Excel, is employed for the network analysis of textual data. In this process, we focus on understanding the relationships between text nodes (hashtags) by examining how they are clustered and connected to explore critical word associations about cryptocurrencies and visualize the central themes that form around the meanings of #cryptocurrency. Before further analysis, posts with at least half of their hashtags in non-English languages are removed. In the end, 956 posts are included in the analysis.

The first step of data analysis consists of the network analysis of textual data (hashtags), which is the procedure of exploring textual structures through the use of networks. Textual network analysis is an extension of social network analysis (SNA), which traditionally focuses on persons as nodes in order to discover social structures. Here, we focus on the text itself as a network of meaning and use hashtags as the nodes to examine how words are clustered and connected. Compared to traditional content analysis, textual network analysis allows for a better visual representation of text structures and fields of meaning, which serve as a form of digital storytelling.

NodeXL extracted 3,787 vertices (the number of nodes in the graph), which were identified with 79,748 unique edges (including multiple connections between two nodes) for 956 individual posts that contained the #cryptocurrency hashtag. The maximum and average geodesic distances were calculated to be 5.0 and 2.21, respectively. This means that the two farthest nodes are connected via five connectors through two intermediate nodes. This indicates that the nodes of this network are relatively close to each other and that the system is fully connected.

The second step consists of a visual analysis of images tagged with the hashtag #cryptocurrency to verify the results of the textual analysis. All images from Instagram are extracted by taking screenshots. A total of 1,000 posts were printed, sorted, and manually analyzed one-by-one for their textual and pictorial components. We divided the visual data into organized categories using open coding, as Chandler [41] advises, to fully understand what to expect from the sample and how the sample evaluate the cryptocurrencies. For the purpose of categorization, we carefully look at the signs, meanings, and goals of the visual data and identify persons, objects, places, feelings, or events in each post (Schroeder, [42]). As Creswell [43] suggests, after identifying the primary codes, themes, which are defined as “similar codes aggregated together to form an idea in the database,” begin to emerge. Categorization aimed to ensure consistency within the textual and visual analyses and avoid fragmentation and randomness. Given that the primary aim of this study is to investigate the motivations of ordinary individuals to buy cryptocurrencies, Instagram served as an ideal context, as it allows for the exploration of how these motivations are constructed through visual and textual media. The following section presents the findings of the study using visual and textual data.

IV. FINDINGS

All figures are to be The Clauset-Newman-Moore grouping algorithm defined more than 20 clusters within this network, which shows that this network is highly diverse. Vertices are plotted into three major networks that are associated with the hashtag #cryptocurrency, and the minor networks in which only a few vertices were found to be related were excluded from further analysis. The network graph that shows the most-connected nodes in the network is presented in Figure 2.

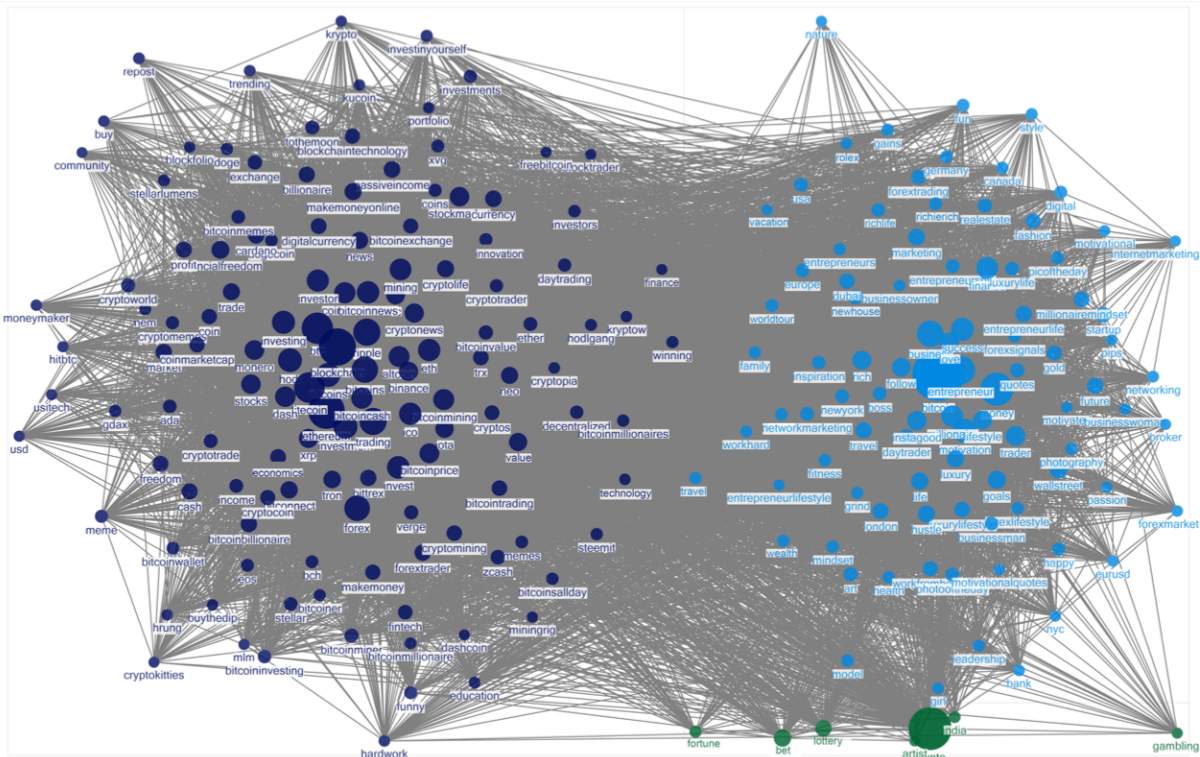


Figure 2. NodeXL network visualization graph for #cryptocurrency hashtag

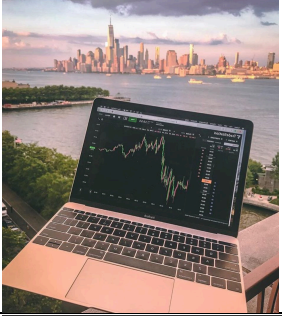
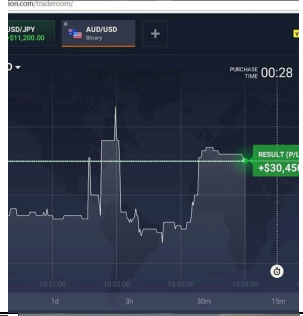

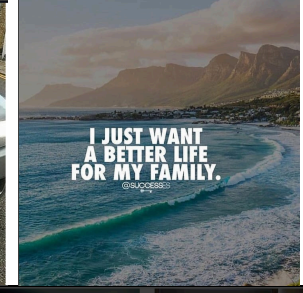

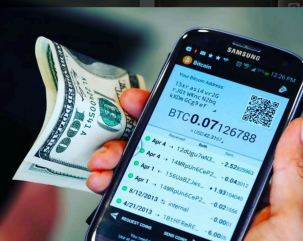
Category	Exemplary hashtags	Exemplary pictures
Tech-savvy	#bitcoin, #blockchain, #investor, #mining	 
Dreamer	#millionaire, #richlife, #wealth, #rich, #happiness	 
Bettor	#gambling, #lottery, #bet, #fortune	 

Figure 3. Exemplary hashtags and pictures associated with #cryptocurrency

Source: These images are reproduced from Instagram public accounts under the Fair Use Act for non-commercial, academic purposes only.

In addition to the network analysis, all hashtags are imported to NVivo, which is a textual data analysis software that forms themes from a massive corpus of text (Ahlquist 2015). A word frequency analysis is employed for 1,000 Instagram posts that consist of 3,787 hashtags associated with the #cryptocurrency hashtag. The NVivo word frequency results demonstrated a perfect fit with the three major categories formed by the social-tagging network analysis. Table 1 presents the statistical distribution of the word frequency analysis. As a result, our preliminary findings suggest three possible clientele groups that we identify as: (1) tech-savvy, (2) dreamer, and (3) bettor. Each group has a logical rationale for using cryptocurrency technology. To better illustrate how each visual analysis of Instagram posts corresponds to the main textual categories, Figure 3 presents the exemplary hashtags and pictures.

All cryptocurrency users are tech-literate and economically motivated. However, they differ in their perceptions and expectations. Rather than monetary incentives or external influences, the primary motivation of tech-savvy consumers is technological curiosity (Pretshus and O'Malley [24]). They are curious about the technology and mechanisms behind cryptocurrencies, follow technological advances in the market, and invest accordingly. They believe that in the future, due to the advancement of the technology, people will use cryptocurrencies rather than fiat currencies, as cryptocurrencies allow for faster transactions. They want to be the first to capitalize on these technological improvements and become pioneers. Kristoffer Koch bought \$27 worth Bitcoin while he was writing his thesis and forgot about his investment for a few years. After barely remembering his password, he realized that the value of his investment had grown to \$900,000. Likewise, Tyler and Cameron Winklevoss, who won \$65 million from a lawsuit against Mark Zuckerberg, invested this money in Bitcoin and became the first Bitcoin billionaires (Ida [18]).

The second group of users is inspired by similar stories of people who became wealthy thanks to their investments in cryptocurrencies. Dreamers are optimistic (Bohr and Bashir [23]) toward virtual currencies and expect them to appreciate in value, thus making them millionaires. Their primary motivation is the hope of having a luxurious life, so they see digital currencies as a fast way of getting rich. As shown by Gibson and Sanbonmatsu [44], an individual's level optimism or pessimism influences their gambling behavior. Therefore, they do not liquidate their coins for small profits, but rather keep them in the hope of acquiring a dream vacation, car, house, or luxury items such as designer clothes. Moreover, dreamers might see this as a positive transformation in their lives that includes personal development and the achievement of generosity and sociability (Binde, [45]; Hedenus, [46]).

Table 1. Word frequency analysis of hashtags associated with the #cryptocurrency hashtag

Word	Count	Weighted Percentage	Cluster
bitcoin	735	4.11%	Tech-savvy
ethereum	353	1.97%	
blockchain	340	1.90%	
litecoin	220	1.23%	
money	220	1.23%	
investors	213	1.19%	
investing	174	0.97%	
bitcoinmining	110	0.62%	
bitcoinprice	107	0.60%	
mining	98	0.55%	
millionaire	95	0.53%	Dreamer
business	94	0.53%	
rich	92	0.51%	
wealth	92	0.51%	
luxurylife	89	0.50%	
entrepreneur	87	0.49%	
success	86	0.48%	
happy	79	0.44%	
health	78	0.44%	
richlife	78	0.44%	
crypto	444	2.48%	Bettor
gambling	68	0.38%	
lottery	60	0.34%	
bet	56	0.31%	
fortune	52	0.29%	

There is ample literature about gambling motivation in the fields of marketing (Lam, [47]), psychiatry (Lee et al. [48]), comparative anthropology (Binde, [49]), economics (Friedman and Savage, [50]), and psychoanalysis (Bergler, [51]). Walker [52] claims that people gamble to win money despite the risks that they take. Indeed, gambling can be summarized as a risk-taking behavior (Bernstein, [53]) that is taken to have the

chance to win something of greater value (Abbott and Volberg, [54]). Lee et al. [55] list five factors that motivate gambling: socialization, amusement, avoidance, excitement, and monetary motives. Meanwhile, Binde [56] lists the factors as the dream of hitting the jackpot, social rewards, intellectual challenge, mood change, and the chance of winning. There is plenty of research that investigates the motivations of gambling, and they often find similar results (Fang and Mowen, [57]; Neighbors et al., [58]; Platz and Millar, [59]; Coman et al., [60]; Bruce and Johnson, [61]; Commission on the Review of the National Policy Toward Gambling, [62]). Some bettors consider cryptocurrency investments as a type of gambling because betting on the right currency among many is risky. Since the adoption of cryptocurrencies for daily use is still uncertain, bettors see this investment as similar to playing roulette; it is the bettor against the house, and skill does not have any importance. For others, investing may be like playing poker or horse race in that their main motivation is the intellectual challenge. They observe the previous trends of different cryptocurrencies and try to bet on the right one. There are also some bettors who consider cryptocurrency investments as a lottery system. In this case, their main motivation is monetary gain. They are also aware of the risks due to wild fluctuations in the prices of various cryptocurrencies. The gamble here is that the price may crash at any time. Bettors are a combination of the first two groups. They like the technological aspect of cryptocurrencies, but also enjoy the adrenaline of betting despite the risks. The difference between a gambling win and a cryptocurrency win is the taxation process. Since digital currencies are entirely decentralized and anonymous, they are impossible to tax.

V. CONCLUSION

As the social and financial impacts of digital currency technology is still under discussion, our findings shed light to the users of the anonymous cryptocurrencies and their motivations. As discussed before, while some economists and countries are in favor of cryptocurrencies, some are in opposition. One of the key aspects of cryptocurrencies is their fixed supply. For example, the Bitcoin system is formed to produce 21 million bitcoins, after which that amount will be fixed. At the moment, they are still being mined, so a standard increasing supply curve can be observed. Only when all Bitcoins are mined will its effects become clearer. For example, at the moment, the transaction costs of Bitcoin are very low as the miners are rewarded with new Bitcoins when they verify a transaction. However, when the supply becomes fixed, miners will likely charge more for their services. This will also cause the emergence of new, uncontrolled markets, such as cyber wallets and security systems. Moreover, due to the high volatility of cryptocurrencies, most central banks only consider them to be speculative instruments. Moreover, some suspect that cryptocurrencies can be used to launder money, as they are anonymous and unregulated. However, what concerns central banks most is their loss of power in forging monetary policy should demand for fiat currencies decrease in favor of cryptocurrencies. For this reason, the central banks of the UK, Sweden, Canada, China, and Singapore are conducting research and planning to form their own cryptocurrencies (Özşahin, [63]). If they do so, the future of both fiat and cryptocurrencies is up for discussion. In addition to central banks, commercial banks would like to benefit from this new technology. According to Financial Times (August 23, 2016), the UBS in Switzerland, Deutsche Bank, Santander, and New York Mellon have formed a group to develop a cryptocurrency, and they are not the only ones. It is too early to tell whether cryptocurrencies are speculative instruments or innovations that will change the global economy. However, the world is taking them seriously and the cryptocurrencies have captured the attention of public authorities, markets, consumers, and researchers. At the moment, the main risks of cryptocurrencies are their use in illegal activities, their volatility, their openness to theft and the loss of cyber wallets, and the fact that it is not possible reverse cryptocurrency transactions. Any regulations or markets that deal with these problems will be a good contribution to the system.

It should be noted that the data analyzed here represent the best data available on the (English-speaking) #cryptocurrency community on Instagram. Despite satisfactory findings in this exploratory analysis, findings might be improved with a combination of other qualitative techniques, such as in-depth interviews, in future empirical research. Also, investigating other hashtags on Instagram such as #bitcoinmining, #bitcoin and #bitcoindexchange and comparing the results may be an area that warrants further research. One limitation of this study is that it does not provide any geographic data on the sample, which means that culture-specific data about the motivations of cryptocurrency users are not available. Therefore, this study could be extended to cryptocurrency users of diverse demographic groups in different cultural contexts to understand the cross-cultural and demographic differences in cryptocurrency adoption. Also, Instagram doesn't allow us to separate cryptocurrency users and non-users. It allows us to see a general picture of the perceptions and motivations. Therefore, it would be beneficial to conduct future studies on Instagram with a sample of digital currency users. Although there are limited studies on cryptocurrencies, as a highly popular technological innovation, it warrants future academic attention.

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