The Dawn of Digital Coins: A Literature Review on Cryptocurrency in the Philippines

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Abstract:- This analysis of the literature aims to shed light on the Philippines decision to follow the alternative currency scheme. Limited knowledge of cryptocurrencies, as well as knowledge of where to find required blockchain wallets on the internet, is now a challenge. Philippines has legalized the used of cryptocurrency approved by the Bangko Sentral ng Pilipinas (Central Bank of the Philippines). It is also used for banks especially by the money transfer outlets that are established in the country. There are popular crypto coins in the Philippines it includes the Bitcoin, Ethereum, XRP, and Bitcoin Cash, this cryptocurrency accepted from various embellishments. Study found out that the prices of cryptocurrency are volatile in nature and it is expected to be at high peak exchange or low peak exchange. It is also noted that central organization of this currency adopt in this technology thru centralized establishments.

Keywords: - Cryptocurrency; Bitcoin; Bitcoin Cash; Ethereum; Ripple; Exchange.

I. INTRODUCTION

The Philippines, officially the Republic of the Philippines, is a Southeast Asian unitary archipelagic nation. The Philippines is the world’s 63rd largest nation by area and 12th by population. The Philippines is the world’s 63rd largest nation by area and 12th by population. The Philippines is one of the most ethnically mixed countries in the world, with a wide range of religious denominations. At the end of 2018, the Philippines had a gross domestic product of $348 billion, making it the 34th biggest economy in the world. Electronics, transportation machinery, petroleum and its derivatives, and agricultural goods make up the majority of the economy. Despite the fact that the agriculture sector employs 30% of the population, the Philippines’ economy is becoming increasingly tech-oriented. Circular No. 944, which developed rules for Virtual Currency exchanges on June 2, 2017, made cryptocurrency legal in the Philippines. The Central Bank of the Philippines is in charge of Bitcoin transactions in the Philippines [1].

Cryptocurrency in the Philippines is delivered thru bank transfer transaction, this deemed necessary to use this kind of currency. Some investors invest thru this technology, the popular cryptocurrency is Bitcoin, Ethereum, Bitcoin Cash and Ripple (XRP). These literature reviews try to provide solutions to address the adoption of this alternative mode of currencies in the Philippines. Now a day’s limited knowledge of cryptocurrency has been an issue such as the knowledge in providing necessary blockchain wallets available in the internet. Security as an issue, these wallets may be address to enhance the idea and capability of one’s account or investors. The main issues with the adoption of cryptocurrencies include an early track record of illiquidity, high volatility and potentially nebulous uses. Most of the issues surrounding the successful adoption of cryptocurrencies is marred in the confusion of whether they are digital or virtual currencies, and as such, how their values are determined [2].

Within recent years, internet-based currencies and payment systems have emerged that do not require banks to process payments. The first, and still the largest, of these so-called crypto currencies was Bitcoin [3] [4]. Unlike most other currencies normally held by the central bank in their international reserves, the supply of cryptocurrencies is not controlled by a central bank but by a highly complex iteration of a mathematical proof. Network users, known as miners, gather blocks of transactions together and vie to verify them. In return, these users receive a new supply of the currency as well as any transaction fees. Several businesses around the world at present accept Bitcoins as a means of final payment [5].

Data Journalist, Statista the World Economic Forum, recent data shows the usage and adoption of countries in cryptocurrency (Fig. 1).
The second and third highest rates of cryptocurrency use in the survey were recorded in Vietnam and the Philippines, respectively. Again, remittance payments play a role in the widespread use of cryptocurrency [6]. According to Helms (2020), the Philippines’ Central Bank has approved several crypto exchanges to operate as “remittance and transfer companies” in the country [7].

II. OVERVIEW OF CRYPTOCURRENCY

Cryptocurrency is a form of virtual money that is focused on cryptography and electronic communication concepts. There have been hundreds of cryptocurrencies launched in recent years, with Bitcoin being the most common. Cryptocurrencies have gained a lot of coverage in recent years [8].

Cryptocurrencies are classified as “a digital representation of value that a.) is intended to serve as a peer-to-peer alternative to government-issued legal tender, b.) is used as a general-purpose medium of trade (independent of any central bank), c.) is protected by cryptography, and d.) can be converted into legal tender.” [9].

Cryptocurrencies are digital tokens created using cryptographic algorithms. This token is then sent around the internet through protocols like peer-to-peer networking. Its worth is extracted mostly from the demand and supply for such tokens, and the decentralization of the environment in which they operate is an integral part of their appeal [5]. Cryptocurrencies have made their way through the economy as a source of alternative currency, speculative assets, and utility tokens for revolutionary service platforms. Regulators are increasingly scrutinizing cryptocurrencies, and a literature on cryptocurrency regulation is emerging. Regulators are considered to be most likely to trigger protocol shifts by interfering with operators' choices. Regulation may encourage the creation of regulatory-compliant cryptocurrency protocols, but it may also encourage the development of protocols that are specifically intended to avoid regulation [10].

Digital currencies have become increasingly popular around the world. Facebook Credits, Microsoft Points, and Amazon Coins are examples of these [5]. These currencies, unlike Bitcoins, are distributed by corporations and are not tied to any demands on physical estate, as previously stated.

In comparison to the years when the technology was seen as a speculative asset or a fleeting fad, blockchain and crypto in Southeast Asia have definitely matured. From a chronological standpoint, the emphasis in 2016 was on all things blockchain. Initial coin offerings (ICOs) were all the rage in 2017, but 2018 was the year of stablecoins. Decentralized finance (DeFi) became the talk of the town last year. Government-backed coins and business coins are expected to rule and take center stage this year, with the focus on China’s Digital Currency Electronic Payment (DCEP) and Cambodia’s “Project Bakong.” [11].

As the second most populous country in Southeast Asia (SEA), the Philippines offers a fertile ground for blockchain growth. With a population of over 107 million people and a 71 percent internet penetration rate, the Philippines is one of the strongest blockchain markets in Southeast Asia. With its massive population, though, comes the task of banking the unbanked, which accounts for a concerning 77 percent of the population. Thankfully, there is Project i2i, which seeks to offer banking services to people living in rural areas, who account for a substantial portion of the archipelago's unbanked population [12].

III. POPULAR CRYPTOCURRENCY COINS IN THE PHILIPPINES AND MARKET VALUE

A. Bitcoin (BTC)

Bitcoin first gained traction in the Philippines in 2017, when its price soared from $1,000 to over $19,000 in a matter of months. Since then, BSP has built a dependable network that protects cryptocurrency consumers whilst still encouraging bitcoin adoption, which is still in its infancy [13].

![Fig. 2. Market Value of Bitcoin](image-url)

- **As of April 07, 2021 11:20AM, 1 BTC = PHP 2,768,478.61**
  - indicative price
  - +643.10%
Fig. 2. shows the current market value for Bitcoin in the Philippines amounting to 2.7 million pesos. It also indicates that 643.10% increase of total value from last year.

B. Ethereum (ETH)

Ethereum is an open-source, decentralized blockchain with smart contract capabilities. The platform's native cryptocurrency is Ether (ETH). After Bitcoin, it is the second-largest cryptocurrency in terms of market capitalization. The Ethereum blockchain is the most widely used [14].

The Ethereum blockchain connects thousands of computers around the world and forms a massive world computer that anyone can access, build, and execute programs on. To operate or execute programs on Ethereum, you need to pay with Ether. Although it is sometimes referred to as a “cryptocurrency”, Ether is not intended to be a currency per se. It is more accurate to say that it is the “crypto-fuel” required to run tasks and transactions on the Ethereum network [15].

C. Bitcoin Cash (BCH)

Bitcoin Cash was developed by bitcoin miners and developers who were concerned about the cryptocurrency's continued life and scaling ability. Separated witness technology, on the other hand, was a point of anxiety for these persons. They claimed SegWit2x did not sufficiently fix the fundamental problem of scalability, nor did it adopt Satoshi Nakamoto’s roadmap, the anonymous community that proposed the blockchain technology that underpins cryptocurrencies [16].

BCH is to increase a maximum block size to process more transactions than BTC. However, even with different block size limits, they have compatible proof-of-work mechanisms with each other. Therefore, miners can freely alternate between BTC and BCH mining to boost their profits [17].

D. Ripple (XRP)

Ripple Inc., a payment solutions firm that also operates the RippleNet cross-border payment network, issues and manages XRP, a digital currency. Ripple started selling XRP in 2012, but in recent years the firm has shifted its focus away from the digital currency and toward its cross-border payment network [18].
Fig. 5. shows the current market value for XRP in the Philippines amounting to 53.30 pesos. It also indicates that 427.93% increase of total value from last year.

IV. POPULAR CRYPTOocurrency EXCHANGE IN THE PHILIPPINES REGISTERED WITH BSP

According to Fintech News Philippines [19], as of 2019 these are the licensed virtual currency exchanges in the Philippines:

- **Coins.ph** - a mobile wallet that allows users to access financial services from their phone. The company provides services including remittances, mobile air-time, bill payments, online shopping at over 100,000 merchants, and cryptocurrency exchange services.
- **ABA Global Philippines** - the latest to receive the nod from Bangko Sentral Ng Pilipinas (BSP). Details on the company are still scarce at the moment.
- **Bexpress** - a crypto trading platform supporting Bitcoin, Ethereum and XRP. The company provides a mobile app that allows users to transact at anytime and anywhere.
- **BloomSolutions (Bloom)** - builds blockchain-based products and services to reduce the cost and improve the customer experience of money transfer. Incorporated in Singapore with operating entities in the Philippines and Australia, Bloom acts as a remittance aggregator platform, a foreign exchange broker, and provides consulting, technical, and advisory services on blockchain development.
- **Coiville** - the latest to receive the nod from Bangko Sentral Ng Pilipinas. Details on the company are still scarce at the moment.

- **ETrans’ subsidiary GOW Exchange** - a cryptocurrency trading platform providing services to institutional investors.
- **Backed by Consensys Ventures Philippine Digital Asset Exchange (PDAX)** - a cryptocurrency trading platform that is still in private beta mode.
- **Rebittance** - a wholly owned subsidiary of Satoshi Citadel Industries (SCI). SCI operates several products including Buybitcoin.ph, an exchange service, Bitbit, a peso and crypto wallet, Rebit, a remittance platform, and Citadax, a crypto exchange.
- **VHEx - one of the 10 cryptocurrency platforms licensed with Bangko Sentral Ng Pilipinas (BSP).**
- **Zybi Tech** - a cryptocurrency exchange platform that enables the trade of Philippine Pesos to Bitcoin, Ethereum and Litecoin.

V. ESTABLISHMENTS THAT SUPPORTS THE CRYPTOocurrency IN THE PHILIPPINES

The Philippine government has also become involved with bitcoin, partnering with Unionbank to create the blockchain software bonds.ph to sell government bonds. In Makati (Metro Manila), Unionbank has also installed a Bitcoin ATM, demonstrating how cryptocurrencies are increasingly becoming popular in the nation [7].

Fintech Philippines (2020), Fintech Philippine Association is the most inclusive financial technology trade association in the Philippines. Established in 2017, it consists of over 100 institutional and individual members and is partnered with technology associations in Denmark, Israel, Japan, Malaysia, Singapore, and Thailand. It is also a founding member of the Asia Pacific Fintech Network and support various companies that support cryptocurrency in the Philippines [20].
Fig. 6. shows the Fintech Philippines map that support variety of digital coins. There is a total of 197 different types of digital support that is categorise in payments, wallets, remittance, credit scoring, comparison, lending, AI / Big data, KYC / security, neobank, block chain/ crypto, e-commerce, crowdfunding and market place / investment.

VI. CONCLUSION

In the Philippines, cryptocurrency is legal. This cryptocurrency is not only legitimate, but the country is also really crypto-friendly. Aside from Bitcoin, the Bangko Sentral ng Pilipinas has registered some other approved cryptocurrencies. It also invests in a variety of crypto initiatives and looks at opportunities to enhance the support it offers to the public. Moreover, different establishments and investors using cryptocurrency come with the ease of registering their business in the Philippines. It is also noted that the volatility of the crypto currency still at stake for the investors. None the less industry of crypto coins in the Philippines is growing rapidly approximately surpass Vietnam in the near future.

ACKNOWLEDGMENT

This research is not possible without the help of Tarlac Agricultural University.

REFERENCES

[6]. Katharina Buchholz Data Journalist, Statista 18 Feb 2021 https://www.weforum.org/agenda/2021/02/how-common-is-cryptocurrency/

[14]. “Ethereum Races Clock to Collect Enough Coins for Big Upgrade”. Bloomberg.com. 23 November 2020
[15]. “What is Ethereum”. Coins.ph. 28 December 2021