Bitcoin and Cryptocurrency ISBN: 978-81-974990-7-4

7. Online Payment Opportunities: PayPal and Bitcoin

Dr. Sandeep Kumar Garg

Associate Professor, Dyal Singh College, University of Delhi, Delhi.

Abstract:

Because digital currency employs distributed information, there is less fraud. Because chargebacks and personal information are needed for transactions using fiat currencies, this is not feasible. You may safely and cost-effectively pay for an item using PayPal. PayPal can return your money and protect your financial information if the purchase proves to be fraudulent.

It's common knowledge to refer to Bitcoin (BTCUSD) as a digital currency that lets you get rewards decentralized from central banks. Similar to this, Bitcoin has several advantages over disadvantages and is intended to be a very helpful invention in the future. It takes only minutes to send Bitcoin, a convenient and easily accessible kind of money. Online payments are becoming more and more common in the current digital era, both for consumers and businesses. Two names stick out among the many options:

PayPal and Bitcoin. Though for rather different causes, both have become quite popular in recent years. We shall examine why Bitcoin and PayPal are influencing online payments in this essay. As the landscape of online payments evolves, PayPal and Bitcoin remain crucial players. Because of their own advantages and qualities, they satisfy a range of user needs. Companies and individuals may successfully navigate the online payment landscape of the future by adopting new trends such as decentralized finance and mobile payments. We will talk about in this essay. Online payment options include Bitcoin and PayPal.

Keywords:

Online Payment, PayPal, Bitcoin, Digital Currency, Central Banks, Currencies, Financial Organizations, Exchange Rates, Transactions, Credit, Buyer Protection, Cryptocurrency

7.1 Introduction:

Every online payment method, including Bitcoin and PayPal, operates differently. By connecting bank accounts, credit cards, or debit cards to PayPal, consumers can make online transactions using this centralized payment network. The digital money known as Bitcoin runs on a peer-to-peer network. It gets rid of the need for middlemen like banks.

In the last few years, cryptocurrency has gained popularity, and its use has found a position in the worldwide financial industry. This year has seen a shift in the use of bitcoin, notwithstanding the volatility of its trading. As a result, financial experts have predicted that the technology would probably endure and continue to have a significant impact in the future.

Additionally, governments and financial institutions are taking notice of the trend as more people adopt the use of digital currencies and associated technologies. Cryptocurrency advancements have given many actors in the global economy new opportunities as well as challenges. Adding Bitcoin as a form of payment to its offerings is a recent development for PayPal, a financial company that may benefit both the company and its customers. [1]

Rapid growth in e-commerce is a chance for companies to boost sales even further. Every business that engages in e-commerce has thought about new strategies to increase revenue from it and has made choices like introducing a new currency. Financial potential arising from e-commerce were not sufficiently fulfilled by the conventional payment system.

Choosing to use new electronic payment systems has numerous advantages for a company. Electronic payment methods are widely used in online transactions between buyers and sellers. Benefits from them includes quicker payouts, improved tracking, transparent transactions, and even shorter transaction times. Electronic payment systems are the norm for transactions these days. Financial transactions using ATMs, credit or debit cards, online or mobile banking, and other means are all part of these networks. Comparing paper-based payments to electronic payments yields significant cost reductions. Online transactions carry a number of financial hazards. Many techniques have been developed to guarantee a secure transaction in light of these risks.

Online transactions require certain technologies, like electronic payment and delivery of goods, transactional data security, customer privacy, and transaction evidence of transactions that customers authorize to the bank and sellers. There will always be certain financial dangers involved with making purchases online, but as new technologies are developed, there is more security for hard-earned money. [2]

When it comes to online transactions, **PayPal**, which was created in 1998, has become wellknown. The platform transformed the way individuals send and receive money online by simplifying and enhancing security of user payments. By connecting their credit cards or bank accounts to their PayPal accounts, consumers may easily complete purchases with a few clicks.

PayPal's success can be attributed in large part to its emphasis on security. The platform lowers the risk of fraud and unlawful transactions by protecting users' financial information with cutting-edge encryption technology.

PayPal provides consumers with additional peace of mind when making online transactions by providing buyer protection and dispute resolution services.

Bitcoin, on the other hand, is a digital currency that runs without the help of a government or central bank. Bitcoin, which was developed in 2009 under the pseudonym Satoshi Nakamoto by an unidentified individual, has become well-known due to its decentralized structure and anonymity potential. The blockchain, a public ledger, records all Bitcoin transactions, guaranteeing security and transparency.

The potential of Bitcoin for speculation and investment is one of the main draws for users. Since its launch, the value of Bitcoin has fluctuated significantly, drawing in investors who try to profit from this volatility. Bitcoin is a desirable alternative for both consumers and businesses since it has cheaper transaction fees than other payment options. [3]

7.2 Review of Literature:

A concept can be created and circulated in the best possible way when a new business is being developed. Issues that need to be considered include the platform of choice, the circumstances that allow for customer cooperation, company culture, and the objectives that must be met. Online communities, which may be situated in many geographic locations, foster relationships that form the foundation of online enterprises (Morabito, 2014, p. 126).

To ensure that workers receive their paychecks, consumers can make payments, and managers can arrange the necessary financial processes, online payments must be developed in these communities. Choosing an online payment option with sufficient explanations and justifications is crucial for businesses. [4]

Smith (2020) claims that as bitcoin is now more stable than it has been recently, PayPal made the appropriate decision to move forward. Apart from the company, the growing ease with which people can now purchase bitcoins has contributed to the cryptocurrency's growth, as has interest from other comparable companies like Cash App and Robinhood.

In the past, buying and using bitcoins required a lot of technical knowledge and time due to the requirement that interested individuals take their own pictures and wait for days for their accounts to be activated. The applicant can now obtain digital cash in less than a day, which has transformed the dynamics of the situation. [5]

Objectives:

- To Study of Online Payment Opportunities: PayPal
- To Study of Online Payment Opportunities: Bitcoin
- Comparison of two online payment systems

7.2.1 Research Methodology:

The overall design of this study was exploratory. The research paper is an effort that is based on secondary data that was gathered from credible publications, the internet, articles, textbooks, and newspapers. The study's research design is primarily descriptive in nature.

7.3 Result and Discussion:

A. PayPal:

PayPal is a digital payments service that enables its users to safely move money between accounts or make payments. A number of individuals, including venture capitalist Peter Thiel and Tesla founder Elon Musk, who established the online banking platform X.com, which PayPal purchased in the early 2000s, contributed to the company's founding in 1999.



Figure 7.1: PayPal

The goal of PayPal's founding members was to develop a secure online payment system. One advantage of using PayPal is that payments can be made without disclosing private information like bank account numbers. PayPal is an alternative to conventional payment methods like checks because of the services it offers.

B. PayPal Works:

PayPal serves as a middleman between sellers and purchasers. To securely preserve their financial information, users can link their preferred payment methods to their PayPal account and create an account. Users have the option to select PayPal as their payment method and approve the transaction when making a purchase. After that, PayPal transmits the money to the seller and deducts it from the designated funding source. By avoiding the direct sharing of sensitive financial information with merchants, this procedure offers ease along with an additional degree of protection. [6]

C. Usage:

To promote their financial operations and collaborate with individuals from other countries, many global internet enterprises use the PayPal payments system (PayPal about: Who we are, n.d., par. 1). The corporations Facebook, Overstock, and Amazon are the best examples of. The fact that this corporation is selected by such internet behemoths cannot be overlooked, even though the Internet is rife with examples of PayPal's less than stellar partnerships with other businesses. Because it is easy for potential customers to register an account, keep it free, and use it whenever needed, PayPal is deemed by the companies to be a suitable payment method.

D. PayPal Fees:

PayPal charges fees and transaction rates for payments made online. The U.S. has a variety of rates and fees that are imposed on merchants and customers. The company provides region-specific market fee summaries on site. Fees are how PayPal, a publicly traded for-profit company, makes money. The business pays staff and maintains a high standard of service with the money it receives from fees. When PayPal's quarterly fee revenue declines, shareholders usually benefit from an increase in the company's stock price. Depending on your identity (consumer or business), the currency you're paying with, and the recipient of the money, PayPal charges varying fees. Each item has a different exchange rate, and as conversion rates vary by country, we do not cover this subject. PayPal charges vary according to the method of payment you choose. In the event that you are handling a cryptocurrency transaction or an international purchase, different fees can be applicable. PayPal does not charge fees on users who reside in the same nation or on transactions under \$99 worth.

E. Online payment opportunities with PayPal:

PayPal is part of the growing trend of digital banking transactions, which has been going on for roughly two decades. All retailers accept payments made online through this service, which may be accessed anywhere using a mobile app or browser. Simple instructions are provided on the screen to let you pay for your online purchases with PayPal; simply click the symbol. You may use PayPal as a payment method to order takeout or make purchases in many establishments. Even ordering a cab or asking for assistance with your Netflix account may be done using PayPal. For those who utilize PayPal frequently, there is a loyalty program that lets you earn cashback and prizes. Points are automatically added to your credit card each time you use PayPal for a transaction; these points can then be redeemed for purchases. This service can be accessed with loyalty cards. Although you don't have a physical credit card, PayPal Credit can be used in the same way. The card is used to access your PayPal balance, which you can use anywhere PayPal is accepted. There are no interest charges if you pay in full each month, although this isn't frequently the case.

Because that's how it functions more than a credit card, it should be referred to as a Venmo debit card. The money you have tied to PayPal is stored in an account called PayPal Cash. When someone sends you money via PayPal, you can use it to transfer money to your external bank with only one click. In certain circumstances, you can use your money to make purchases through PayPal and pay using Google Pay or Samsung Pay without worrying about establishing a connection to your bank account.

Having been in operation since 1998, PayPal is a well-known online payment processor. It enables users to safely send and receive money using credit/debit cards or bank accounts via the internet. It provides a number of attributes:

Security: PayPal protects your financial information during transactions by using strong encryption and fraud prevention techniques.

Convenience: PayPal simplifies the checkout process on many websites by allowing consumers to make payments with a few clicks.

Buyer Protection: For qualified purchases, PayPal offers buyer protection by providing reimbursements or support in the event of a dispute.

Global Reach: PayPal is perfect for international transactions because it is available in more than 200 countries and supports a number of currencies.

Business Integration: PayPal gives businesses an easy way to take online payments and gives them tools to manage sales and customer information. [7]

7.4 Bitcoin



Figure 7.2: Bitcoin

A novel alternative for cash is cryptocurrency. Governments do not regulate supply levels, nor do central banks have a role in their issuance. The blockchain technology is the foundation for how they function. Direct money transfers are now feasible without the need for a middleman thanks to cryptography technologies. Bitcoin (BTC), the original cryptocurrency, debuted in 2009. Since then, a large number of new cryptocurrency projects—known as altcoins—have been developed using the same technological advancements as Bitcoin.

Among other things, electronic commerce responds to customer preferences by using a variety of payment options. One aspect that unites all currently in use payment systems is the participation of a reliable third party, primarily a bank. Direct, irrevocable electronic payments between the parties to a transaction were not possible prior to 2009. The first cryptocurrency, Bitcoin (BTC), was created by Satoshi Nakamoto to fill this demand. The base of trust in this electronic payment system was cryptographic evidence. When transferring money directly with cryptocurrency, the financial intermediary does not need to impose information, such as the identification of the persons involved, as is the case with traditional payment systems that have a trust issues.

Similar to cash payments, cryptocurrency payments are anonymous. This functionality is a result of the technological advancements made by cryptologist and proponent of anonymous electronic payments Dawid Chaum. He developed a mechanism called a blind signature that makes it possible to conceal the identity of a person using digital currency to make payments. [8]

A. Bitcoin Works:

Blockchain technology, which is transparent and decentralized, is used by Bitcoin to record transactions. Users save their money in digital wallets, and in order to complete a transaction, a network of computers must validate it with a digital signature.

B. Usage:

Many businesses these days have chosen to accept Bitcoin as their primary form of payment. The business that uses PayPal as a payment option is Overstock. This business, however, doesn't stop at just one system. Because of the current overstocking, Overstock could be identified as the company that uses Bitcoin to sell its tickets at a reduced price. Another business that could serve as a model for using Bitcoin is Microsoft.

This company gives its clients the choice to think about their Xbox and Windows options and purchase content using Bitcoin services. Lastly, Tesla might be included in the user list. This company specializes in selling cars. Customers and partners of Tesla could create a new payment system by using Bitcoin to pay for the services.

C. Online payment opportunities with Bitcoin:

Bitcoin has a lot of benefits like less transaction costs and quicker processing. Although the potential has increased with new technologies like the Lightning Network, it is particularly helpful for transfers across international borders. It is accessible to everyone, even those without a bank account. One popular cryptocurrency that has a lot to offer its customers is Bitcoin.

Users can transact autonomous with Bitcoin: "Banks are susceptible to economic boombust cycles. Crashing can happen in any of these scenarios, depriving users of their freedom. Owners and users of Bitcoin maintain control over their funds because it is not governed by any laws."

Private Bitcoin transactions include Due to the need for multiple party and intermediary verification, online transactions can be costly and time-consuming. Similar to having numerous usernames and passwords, bitcoin transactions require additional information in addition to the IP address or other identifying information. They are not anonymous and can be tracked to a specific blockchain address.

Bitcoin is a decentralized cryptocurrency: - Since Bitcoin is a peer-to-peer payment system, money can be sent and received globally between any two users on the network. When sending bitcoin from a regulated institution, parties do need permission from an outside party or authority.

No Bank Fees: Using Bitcoin to pay for trades is less expensive and governed than other options. There are no overdraft costs and reduced fees, such as "maker" and "taker" fees. As a result, Bitcoin has an advantage over other exchanges.

Low fees apply to international Bitcoin transactions: - Travelers can benefit greatly from the significantly lower cost of Bitcoin transactions compared to bank transfers. Bitcoins can be completed quickly, but they also require minimal authorization, so there's no need to wait a long time.

Mobile payments: - Anyone with access to the Internet can purchase bitcoins from any location. It doesn't need personal information the way bank accounts, and credit cards do. Because transactions are anonymous, Bitcoin is ideal if, for any reason, you feel uncomfortable conversing with people or being in public.

Transactions using Bitcoin are not reversible: Transactions made with Bitcoin are irreversible and cannot be undone. Reversing a Bitcoin transaction can only be done by asking the recipient to return the original cryptocurrency.

Safe transactions using Bitcoin: - Because it is impossible to hack a cryptocurrency exchange, bitcoin transactions are safe. If hackers do not have access to the private keys, they cannot take bitcoins from thieves. However, thieves do have access to the private keys.

Known for its peer-to-peer network, the blockchain, Bitcoin is a decentralized digital money that was first showcased in 2009. Bitcoin offers distinct advantages over traditional currencies since it is not governed by a single entity. Features:

Decentralization: Since Bitcoin is a decentralized currency, there is no need for middlemen like banks, which may lead to cheaper transaction costs.

Anonymity: Users have some privacy because Bitcoin transactions don't need personal information.

Global Transactions: Since Bitcoin is not limited by geography, anyone can use it as a form of payment anywhere in the globe.

Inflation Hedge: For people looking to hedge against inflation, Bitcoin is an appealing choice due to its restricted supply, which is capped at 21 million coins.

Potential for Investment: Because of Bitcoin's past price increases, some people view it as a possible investment. It's important to remember that there is inherent risk and volatility with it. [9]

7.5 Key Differences Between PayPal and Bitcoin:

The way transactions are handled is one of the main distinctions between Bitcoin and PayPal. Bitcoin transactions are sluggish but irreversible, whereas PayPal transactions are instantaneous and reversible. Because of this, Bitcoin is better suited for larger transactions where security and transparency are crucial, whereas PayPal is more appropriate for regular purchases when speed and convenience are crucial.

What privacy and anonymity each platform provides is another distinction. PayPal is a less private choice for people who are concerned about their internet privacy because it needs users to verify their identity and link their financial accounts. In contrast, Bitcoin enables users to conduct transactions under a pseudonym without disclosing their true identity.

With regard to online payments, each of PayPal and Bitcoin has specific benefits and drawbacks. While Bitcoin offers a more transparent and secure option, PayPal gives a quick and easy way to send money. Your own demands and preferences will determine whether you utilize Bitcoin or PayPal. In the digital age, both payment options are here to stay, that much is certain.

You may compare two online payment systems, PayPal and Bitcoin, in brief using the table below. You can also see the advantages and disadvantages of each company to help you make your decision.

PayPai	Bitcoin
 Pros: Brand name; Reputation for more than 10 years (<i>PayPal about: Who we are</i>, n.d., par. 1); Easy setup; Customer awareness of the company; No necessity to create PayPal accounts to transit money to another PayPal account, and Integration with different shopping cards systems. 	 Pros: The introduction of a new currency; Private network; No government affiliation; Identity protection (<i>Bitcoin:</i> <i>Frequently asked questions</i>, n.d. par. 15); Low or no costs for international payments; Innovations and new approaches to business development; Simple structure and affordability;
 Cons: Poor security protection; Existing high fees for charge-backs; Poor work of customer service department; No anonymity because of the possible connection to bank accounts (<i>PayPal about: Who we are</i>, n.d., par. 1), and Inabilities to deal with competitions that are based on innovations. 	 Cons: Irreversible transactions; The necessity to exchange any currency into Bitcoin currency; Time to study how to convert money and compare the change; Volatility (<i>Bitcoin: Frequently asked questions</i>, n.d. par. 17).

Table 7.1: PayPal and Bitcoin Comparison. [10]

7.6 Conclusion:

For the Bitcoin and PayPal communities, it is arguable that the announcement that PayPal will use cryptocurrencies for digital payments is a positive move. There is nothing to lose for the supporters of digital currencies, and this integration will only raise awareness within it. People will learn about cryptocurrency and how to buy coins from this. This will also contribute to the continued growth of the cryptocurrency sector. Additionally, the PayPal community now has easier access to the cryptocurrency world because they may purchase many cryptocurrencies on the site. The cryptocurrency space, led by Bitcoin, is where financial technology is headed. By adding bitcoins as a payment option to its operations, PayPal has made a significant step forward.

Despite its benefits, very few individuals and organizations use cryptocurrency, which has been around for about ten years. On the other hand, during the last three years, the financial sector has witnessed an ongoing increase in the cost of technology and stability in its use. As a result, PayPal has taken a risky move that might improve client happiness and advance financial technology.

7.7 References:

- 1. Gogo, J. (2020). PayPal bought 70% of all newly mined bitcoin last month as demand rockets | news bitcoin news. Bitcoin News.
- McAndrews, J., Wang, Z. (2008). The Economics of Two-Sided Payment Card Markets: Pricing, Adoption and Usage. Federal Reserve Bank of Kansas City Research Working Paper 08-12
- 3. Nakamoto, S. (2008). Bitcoin: A Peer-to-Peer Electronic Cash System.
- 4. Morabito, V. (2014). Trends and challenges in digital business innovation. New York, NY: Springer Science & Business Media.
- 5. Smith, S. (2020). Bitcoin and PayPal have made headlines, but what about other crypto trends? Forbes.
- 6. Torpey, K. (2014). Andreas Antonopoulos Lays Out the 3 Pillars of Bitcoin Mass Adoption.
- Economist Staff (31 October 2015). "Blockchains: The great chain of being sure about things". The Economist. Archived from the original on 3 July 2016. Retrieved 18 June 2016.
- 8. Wallace, Benjamin (23 November 2011). "The Rise and Fall of Bitcoin". Wired. Archived from the original on 31 October 2013. Retrieved 13 October 2012.
- Popper, Nathaniel (30 August 2014). "Hal Finney, Cryptographer and Bitcoin Pioneer, Dies at 58". The New York Times. Archived from the original on 3 September 2014. Retrieved 2 September 2014.
- Cooper, Anderson (16 May 2019). "Meet the man who spent millions worth of bitcoin on pizza". CBS News. Archived from the original on 8 December 2021. Retrieved 8 December 2021.