

## The effect of Bitcoin on E-Commerce

*Amaal Mohamed Fawzi Almasri*

**E-mail:** [amaal.almasri90@yahoo.com](mailto:amaal.almasri90@yahoo.com)

**Received:** 5 Nov. 2017, **Revised:** 13 Nov. 2017, **Accepted:** 25 Nov. 2017

**Published online:** 6 Feb. 2018.

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### Abstract

Certain inventions change the landscape of the world. Smartphones, airplanes, social networking websites, and other important inventions changed the lives of people. The growth in technology in the world today was essential in making the inventions above and this growth in technology has expanded to every aspect of life. The general population knows the typical ways of currency like paper money, coins, checks, and credit cards, but Bitcoin is considered the new form of currency. We will talk about Bitcoin currency as an example of an invention that changed the world and what is the change that is made in E-commerce.

**Keywords:** Bitcoin, cryptocurrencies, E-Commerce, digital currency, blockchain, innovation.

## **Introduction**

Bitcoin is an online payment system invented by Satoshi Nakamoto. It is an electronic currency that has no relation with any central bank or government agency(currency code: BTC).

Satoshi Nakamoto published his invention in 2008 and released it as open-source software in 2009. Bitcoin allows users to send payments within a decentralized, peer-to-peer network and is unique in that it does not require a central clearinghouse or financial institution to clear transactions. Users must have an Internet connection and Bitcoin software to make payments to another public account/address(Boslaugh, 2016).

In a Bitcoin transaction, there is no third-party intermediary. The buyer and seller interact directly (peer to peer), but their identities are encrypted, and no personal information is transferred from one to the other. Bitcoin transactions are thought to be pseudonymous, not anonymous because there is a transaction record. A full transaction record of every bitcoin and every Bitcoin user's encrypted identity is maintained on the public ledger. The scale of Bitcoin still remains small in comparison with traditional electronic payment systems(Boslaugh, 2016).

The smallest unit of Bitcoin is called Satoshi; 1 bitcoin contains 100 million Satoshi.

We can list some advantages for Bitcoin:-

- 1- lower transaction costs
- 2- Increased privacy

- 3- long-term protection of loss of purchasing power from inflation.
- 4- The disadvantages include:
- 5- The sizable volatility of the price of bitcoins,
- 6- The uncertain security from theft and fraud
- 7- The long-term deflationary bias that encourages the hoarding of bitcoins(Boslaugh, 2016).

## **The study problem**

This study focuses on the Bitcoin and E-Commerce and answering on the following questions:-

- 1- How is Bitcoin Changing Online E-Commerce?
- 2- What are the advantages and disadvantages of the Bitcoin?
- 3- How is Bitcoin inspiring the innovation?

## **What distinguishes this study from previous studies?**

The previous studies talk about the Bitcoin from the view of business only. In this study we discussed the advantages and disadvantages of the Bitcoin, it's effect on innovation, it's effect on the future of E-Commerce, and the problems that Bitcoin solved.

## **The Study Content**

### **1.0 What is E-Commerce?**

Ecommerce, also known as electronic commerce or internet commerce, refers to the buying and selling of goods or services using the internet, and the transfer of money and data to execute these transactions. The types of E-commerce include business-to-business (B2B), business-to-consumer (B2C) or business-to-government (B2G).

E-commerce can improve communication and doing E-Commerce business is easier. The main objective of Cryptocurrencies is to replace centralized systems, eliminating the need for an intermediary and by this greatly simplify the shopping process. With Ecommerce, there is a possibility to reach more people across the globe at less expense than the traditional business. With the introduction of a new concept like cryptocurrency, Bitcoin is a highly secured digital currency, used by more people. It simply allows its users to move value around the World Wide Web(Neethidevan, 2019).

## **2.0 How is Bitcoin Changing Online E-Commerce?**

Although some risks, bitcoin is considered a very interesting technology that changed E-Commerce. And here's how bitcoin did that.

Ofir Beigel, founder of bitcoin guides site said: "Bitcoin is gradually infiltrating E-commerce because it's a viable, innovative and somewhat "sexy" solution. Companies like Overstock, New Egg, Tiger Direct and many others understand this and are attracting many customers because of it."

According to The Forbes, the Bitcoin provides:-

### **2.1 Instant Gratification**

Bitcoin certainly fits our desire to do everything immediately. Instead of waiting hours, days or even weeks for a payment transaction to go through, bitcoin is for the most part instant -actually 10 minutes-. This gives a person the peace of mind in knowing that a product or service has instantly gone through instead of it pending, waiting for approval or anxiously figuring out why your PayPal account is blocked. This will continue to be approved on so that transactions will literally be instant - which we're almost at now.

However, it could also speed up the transaction process. Again, since merchants are waiting days for a payment to clear, they could instantly ship out products. While Amazon, for example, is great at exhilarated shipping, just imagine

how more efficient and quickly it could send out products because of direct and instant payments(‘How is E-Commerce Business Revolutionized by Bitcoin Currency?’, n.d.).

## **2.2 Makes Conducting Business Overseas Easier**

For people living in developed countries, locating a bank or service like PayPal is not a problem. In fact, most of us take that for granted. But, what about people living in developing countries? They simply don’t have that easy access to financial institutions or services because it’s simply too risky. But, that all changes with bitcoin.

Gone are the days of fearing to do business with financial institutions in certain countries or accepting local currency. Because bitcoin is essentially a peer-to-peer service, payment can reach its intended destination safely. This should help to increase business with developing countries and allow marketers from these parts of the world to finally participate in online commerce.

Tony Gallippi, co-founder and CEO of Bitpay, said that in a few years’ time, bitcoin will be pervasive, but most people won't even see it. The technology is so robust and capable that it's likely to become the backbone for myriad transactions, not just consumers buying on E-Commerce sites. That will happen too, but any time money needs to move, from institutions, businesses, individuals, and even governments, they may end up using cryptocurrency. When it's free, secure, instant, scalable (up and down) and accessible from anywhere on the globe, why wouldn't you?

Bitcoin also makes sure that the days of converting money or paying foreign fees are over. Because it’s the same currency all-over-the-world, doing commerce with people or companies overseas has never been easier and more cost-effective. This will continue to make a global marketplace a reality.

### **2.3 Avoids Fees**

As previously mentioned, bitcoin can erase those expenses and inconvenience fees between merchants in different countries. Bitcoin, however, can also help merchants avoid those pricey fees that we've unfortunately become accustomed to.

For example, there are interchangeable and discount fees. Interchange fees are what the issuing banks are charging you, while discount fees are what the acquiring bank is making. There's also the chance that you could face the nightmare of chargebacks, which is when a consumer disputes a transaction.

Because there are various channels that a normal credit card transaction must go through, such as the actual credit card network and payment gateways, these fees are a necessary evil. Because these middlemen aren't involved with bitcoin, no one has to be concerned over fees and chargebacks. For those concerned over budgets, bitcoin is going to make life a little bit stressful.

We've pushed all our clients to use bitcoin for their checkout. Some of them have saved 1000's of dollars in fees each month.

### **2.4 Establishes Trust**

Bitcoin, unlike traditional banks, puts the customer first. Banks may try to state otherwise, but there aren't any other financial institutions that allow people to complete access and control over their finances. As mentioned, you can send and receive payments instantly. This allows you to have access to an updated budget. More important, however, is that this allows you to run your business the way you want because you don't have to follow the regulations laid out by banks or other financial services.

Also, consider how trustworthy bitcoin is when compared to banks that are often put in jeopardy. Bitcoin is extremely secure, despite not being insured by the FDIC. For example, you can back up your wallet's digital keys, encrypt your keys

and even place your bitcoins in ‘cold storage’ - bitcoin keys stored offline. There’s also the multi-signature feature that can be used against theft. This means that an organization or company grants the withdrawal of funds only after 3 of 5 members approve the transaction. And, because you can’t spend the same coin twice and everything is noted on a public ledger, this should cut down the amount of fraud and embezzlement.

One other security perk is that people can create a new bitcoin address to make one-time purchases. This ensures that even if the company where you made a purchase is hacked, all of your other financial information isn’t put in jeopardy.

## **2.5 Inspires Innovation**

Of course, bitcoin has its flaws and risks - there’s a limit and it can be stolen. However, the idea is one that is inspiring entrepreneurs. For starters, because bitcoin is an open-source ecosystem for programming, the model can be improved upon for future products, services, and apps.

For example, bitcoin isn’t the only cryptocurrency available or that’s going to change how eCommerce works online in the future. There is Dogecoin, Litecoin, Ripple, Peercoin and Mastercoin that could all improve or fix the problems associated with bitcoin. With the growing popularity and interest in this field, transactions will become faster, more convenient, cheaper and more efficient. In short, it’s going to change banking and the financial system.

More interesting, however, is the potential of other parts of bitcoin that could be used for other innovations. Take the idea of digital keys. That technology could be used for companies that aren’t involved with just transferring money. For example, bitcoin could solve the concern over copyrights since media files could be transferred between users legally thanks to a bitcoin address and encryption code. The private digital keys could also be used for home security, keeping votes secure,

timestamp contractual documents and even be used to create a decentralized social media network('How Bitcoin Is Changing Online eCommerce', n.d.).

### **The Results of the study**

The use of Bitcoins is increasing rapidly. Bitcoins are utilized in e-commerce to purchase both legal and illegal goods, they are transferred and traded, and companies have invested their capital in the new digital currency. While the technical aspects of the system are well established, the legal framework remains unclear. Legislators and businessmen all over the world are just starting to discover this new virtual phenomenon and benefit from it's advantages(Böhme, Brenner, Moore, & Smith, 2014).

### **The suggestions**

The relationship between e-commerce and Bitcoin is really evolving, and hopefully soon reach a more rewarding point where both merchant and buyer will get more benefits from it. So, I think the timing of the innovation could not have been better. Also, it's the best time to benefit from Bitcoin and it's advantaged over traditional money transfer.

### **Conclusion**

Bitcoin is an exciting new platform to use for currency. More people are investing in this groundbreaking form of cryptocurrency. Bitcoin has had a relatively quick rise, fall, and rise again story with what it's doing.

Due to risk profiles and improper access to available payment gates such as PayPal, bank, and other third-party payments, still, a large number of global populations are excluded from participating and enjoying the benefits of E-commerce. With a Bitcoin wallet, buyers can easily avoid foreign exchange fees while buying products overseas. Fiat money transferred to digital currency can be transferred to any corner of the world without any restrictions.



Since the Bitcoin wallet is completely digital by nature, it allows users to save and back up multiple copies of the same wallet. It also allows retrieving complete user data by any chance users lost their wallet. Even for high-security purposes, Bitcoin wallets can only be accessed with the private key of the user('The Impact of the Bitcoin Revolution on ecommerce Industry - Digital Doughnut', n.d.).

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