

# ASSIGNMENT ON E-COMMERCE

**Submitted to:**

Grace joseph

Asst. Professor

Dept.of Computer Application.

**Submitted by:**

Praveen Prasad

Reg-MCA-S5

Roll no: 42

Dept.of Computer Application

## **CRYPTOCURRENCY**

A cryptocurrency (or crypto currency) is a digital asset designed to work as a medium of exchange wherein individual coin ownership records are stored in a ledger existing in a form of computerized database using strong cryptography to secure transaction records, to control the creation of additional coins, and to verify the transfer of coin ownership. It typically does not exist in physical form (like paper money) and is typically not issued by a central authority. Cryptocurrencies typically use decentralized control as opposed to centralized digital currency and central banking systems. When a cryptocurrency is minted or created prior to issuance or issued by a single issuer, it is generally considered centralized. When implemented with decentralized control, each cryptocurrency works through distributed ledger technology, typically a blockchain, that serves as a public financial transaction database.

### **Types of Cryptocurrency**

#### **Bitcoin**

The first blockchain-based cryptocurrency was bitcoin, which still remains the most popular and most valuable. Bitcoin is a digital currency created in January 2009 following the housing market crash. It follows the ideas set out in a whitepaper by the mysterious and pseudonymous Satoshi Nakamoto. The identity of the person or persons who created the technology is still a mystery. Bitcoin offers the promise of lower transaction fees than traditional online payment mechanisms and is operated by a decentralized authority, unlike government-issued currencies.

#### **Ethereum (ETH)**

The first bitcoin alternative on our list, Ethereum is a decentralized software platform that enables smart Contracts and Decentralized Applications (DApps) to be built and run without any downtime, fraud, control, or interference from a third party. The applications on Ethereum are run on its platform-specific cryptographic token, ether. Ether is like a vehicle for moving around on the Ethereum platform and is sought by mostly developers looking to develop and run applications inside Ethereum, or now by investors looking to make purchases of other digital currencies using ether.

Ether, launched in 2015, is currently the second-largest digital currency by market cap after bitcoin, although it lags behind the dominant cryptocurrency by a significant margin. As of January 2020, ether's market cap is roughly 1/10 the size of bitcoin's.

### **Ripple (XRP)**

Ripple is a real-time global settlement network that offers instant, certain and low-cost international payments. Launched in 2012, Ripple “enables banks to settle cross-border payments in real-time, with end-to-end transparency, and at lower costs. Ripple’s consensus ledger (its method of conformation) is unique in that it doesn’t require mining. Indeed, all of Ripple's XRP tokens were "pre-mined" before launch, meaning that there is no "creation" of XRP over time, only the introduction and removal of XRP from the market supply according to the network's guidelines. In this way, Ripple sets itself apart from bitcoin and many other altcoins. Tether(USDT) Tether was one of the first and most popular of a group of so-called stable coins, cryptocurrencies which aim to peg their market value to a currency or other external reference point so as to reduce volatility. Because most digital currencies, even major ones like bitcoin, have experienced frequent periods of dramatic volatility, Tether and other stable coins attempt to smooth out price fluctuations in order to attract users who may otherwise be cautious.

### **Monero (XMR)**

Monero is a secure, private, and untraceable currency. This open-source cryptocurrency was launched in April 2014 and soon spiked great interest among the cryptography community and enthusiasts. The development of this cryptocurrency is completely donation-based and community-driven. Monero has been launched with a strong focus on decentralization and scalability, and it enables complete privacy by using a special technique called ring signatures.

## **HOW CRYPTOCURRENCY WORK**

**Public Ledgers:** All confirmed transactions from the start of a cryptocurrency’s creation are stored in a public ledger. The identities of the coin owners are encrypted, and the system uses other cryptographic techniques to ensure the legitimacy of record keeping. The ledger ensures that corresponding “digital wallets” can calculate an accurate spendable balance. Also, new

transactions can be checked to ensure that each transaction uses only coins currently owned by the spender. Bitcoin calls this public ledger a “transaction block chain.”

**Transactions:** A transfer of funds between two digital wallets is called a transaction. That transaction gets submitted to a public ledger and awaits confirmation. Wallets use an encrypted electronic signature when a transaction is made. The signature is an encrypted piece of data called a cryptographic signature and it provides a mathematical proof that the transaction came from the owner of the wallet. The confirmation process takes a bit of time (ten minutes for bitcoin) while “miners” mine. Mining confirms the transactions and adds them to the public ledger.

**Mining:** Mining is the process of confirming transactions and adding them to a public ledger. To add a transaction to the ledger, the “miner” must solve an increasingly-complex computational problem (like a mathematical puzzle). Mining is open source so that anyone can confirm the transaction. The first “miner” to solve the puzzle adds a “block” of transactions to the ledger. The way in which transactions, blocks, and the public blockchain ledger work together ensure that no one individual can easily add or change a block at will. Once a block is added to the ledger, all correlating transactions are permanent, and they add a small transaction fee to the miner’s wallet (along with newly created coins). The mining process is what gives value to the coins and is known as a proof-of-work system.

## **HOW TO USE CRYPTOCURRENCY**

### **1. Pick a Reputable Exchange**

Before owning any cryptocurrency, it’s important to research the reputable brands in the market which provide exchange services. This will have a direct impact on where you purchase your cryptocurrencies, how you trade, and the community in which you will become involved.

As a beginner, it’s important to focus on buying your cryptocurrency from a trusted and reliable source. Instead of focusing on “getting the best deal”, go with the exchange with

the best reputation. Even if it costs a bit more, it's worth the piece of mind and security. Due to the nature of cryptocurrencies, scammers are abundant. It's a global market where transactions are final. Once you have sent a cryptocurrency payment, there are no charge backs, no banks you can call, and absolutely no way to become reimbursed. Getting a sweet deal in crypto can mean getting scammed.

The most trusted exchange for purchasing cryptocurrency is Coinbase. We highly recommend beginning your journey with Coinbase because you can rest assured your funds are secure, their support team is ready to answer any questions, and the experience is enjoyable. No other exchange compares to the reputation of Coinbase.

In order to get started with Coinbase, read our guide on how to purchase your first cryptocurrency and set up a portfolio.

## **2. Pick a Simple Strategy**

The beginning of your journey into the cryptocurrency market will be hectic. You will quickly become bombarded with ideas for trading strategies. Before you dive into the complex trading strategies you hear about on Twitter or Facebook from self proclaimed gurus, find a strategy that's simple to implement and maintain as you learn.

Remember there is no magic bullet. There has never been and there will never be a strategy which guarantees returns. However, there are strategies which can reduce risk. The most popular of these strategies is portfolio indexing and rebalancing. This is a strategy that has been trusted by financial institutions for decades, so we can be confident the strategy has been well tested and examined.

## **3. Automate**

The cryptocurrency market never sleeps. There are no closing hours or holidays. Services are running every second of every day. The constant requirement to be online drives people mad. Monitoring the market at every moment is exhausting. You don't want to be online 24/7, trust me. It will turn into a nightmare, burning you out.

Before you spiral into this future, find a service which helps you automate your strategy. There are a number of easy to use applications in the market which provide portfolio automation tools, so sign up for one of the trusted services.

#### **4. Build a Portfolio**

Putting all your eggs into one basket is a recipe for disaster. Constructing a portfolio can reduce risk and provide stability in this volatile market. Instead of buying a single asset and praying for a moon, distribute risk to a number of assets and manage that portfolio by making small adjustments to your positions.

#### **5. Keep assets in cold storage**

While you may have selected a reputable exchange in order to store your cryptocurrency, you never know when the sky might fall. The cryptocurrency space has a history of surprises when it comes to hacks. Funds can be lost in a hack at any moment, so it's always encouraged to keep your assets off the exchange as much as possible. This is certainly a leap, so take your time to research options. One option for a convenient mobile hardware wallet is the Ledger Nano X. It's simple, it works, and you can rest easy because your funds are secure.

Being the guardian of your own bank is great, but it means you must find services which can accommodate keeping funds off the exchange. Unfortunately, the options are few and far between. Thankfully, those people who rebalance their portfolio can continue rebalancing even when most assets are stored offline. This is possible because rebalancing only requires trading the delta for each rebalance period. The delta is the amount of the asset which must be traded in order to once again reach your desired allocations.

#### **6. Be patient**

Although the market is volatile, that doesn't mean the value of your portfolio will skyrocket over night. Once you've implemented your strategy, let the strategy work. Explore the intricacies of your strategy, engage with the strategy for some time. It doesn't happen over night. Enjoy the process of learning. Build up your expertise with weeks of careful research until you've mastered your strategy.