

Think BIG. Dream BIG.

Biddles Investment Group

Introduction to Bitcoin

Your Presenter

Brandon Biddles is a Michigan native who attended and graduated from Oakland University with a BA in Communications and a Masters in Business Administration in Finance. Brandon has worked in the financial services and healthcare industries as a Performance Improvement Project Management Consultant and has obtained his Project Management Professional Certification through PMI Institute.

Brandon has a passion for the stock market, investing, and financial literacy. His hobby is swing trading stocks in the stock market and he has a raging passion to make others make their money work for them. That led him to build a social enterprise and website, TeamBiddles to help empower You to get on sound financial footing and to be confident in Your finances so eventually You can be comfortable to invest on Your own. In addition, He is also passionate about entrepreneurship and helping you find things you are passionate about to establish additional streams of income.

"In today's reality, in order for people to not just survive, but to thrive they cannot be dependent only on one stream of income. Picture a table with one leg at the center, remove that leg and it falls. Now picture a table with 4 legs, if one leg is removed the table may wobble but it still stands. Coronavirus has made this even more imperative." - Brandon J. Biddles

Always optimistic, encouraging and motivating Brandon wants you to Think BIG. Dream BIG. hence Biddles Investment Group was formed. TeamBiddles is the education platform for Biddles Investment Group.

Other Notable Honors:

- Board Member Detroit Phoenix Center
- Still Standing Board Treasurer
- New Leaders Council Fellow Detroit Chapter





What Is Bitcoin

The Basics

What is a Bitcoin?



- ★ The first thing to know: All investments carry risk, but experimental cryptocurrencies like bitcoin are among the riskiest. Never invest more than you can afford to lose. As prices rise, so does public interest in buying bitcoin.
- ★ As prices rise, so does public interest in buying bitcoin.
 - \$3,000 to \$8,000 with a high of \$20,000 (2017 high)
 - Bitcoin value follows the law of supply and demand and because demand waxes and wanes,
 there's a lot of volatility in the cryptocurrency's price.
- ★ A decentralized form of digital cash that eliminates the need for traditional intermediaries like banks and governments to make financial transactions.

What is Bitcoin?

- ★ Bitcoin is the first cryptocurrency established
- ★ The <u>cryptocurrency</u> invented in 2008 by an unknown person or group of people using the name <u>Satoshi Nakamoto^[15]</u> and started in 2009^[16] when its source code was released as <u>open-source software</u>
- ★ Transactions are made with no middle men meaning, no banks!
- ★ Bitcoin can be used to book hotels on Expedia, shop for furniture on Overstock and buy Xbox games. But much of the hype is about getting rich by trading it. The price of bitcoin skyrocketed into the thousands in 2017.
 - Bitcoins can be used to buy merchandise anonymously.
 - o In addition, international payments are easy and cheap because bitcoins are not tied to any country or subject to regulation.
 - Small businesses may like them because there are no credit card fees. Some people just buy bitcoins as an investment, hoping that they'll go up in value.







- ★ Bitcoin uses peer-to-peer technology to operate with no central authority or banks; managing transactions and the issuing of bitcoins is carried out collectively by the network.
- ★ Bitcoin is open-source; its design is public, nobody owns or controls Bitcoin and everyone can take part.
- ★ Through many of its unique properties, Bitcoin allows exciting uses that could not be covered by any previous payment system
- ★ Similarly to email, you don't need to ask recipients you're sending bitcoin to, to use the same software, wallets or service providers. You just need their bitcoin address and then you can transact with them anytime. The Bitcoin network is always running and never sleeps, even on weekends and holidays.

Basic Framework



★ Blockchain

- Bitcoin is powered by open-source code known as blockchain, which creates a shared public ledger on which the Bitcoin network relies. Each transaction is a "block" that is "chained" to the code, creating a permanent record of each transaction. Blockchain technology is at the heart of more than 2,200 cryptocurrencies that have followed in bitcoin's wake.
- All confirmed transactions are included in the block chain. It allows Bitcoin wallets to
 calculate their spendable balance so that new transactions can be verified thereby ensuring
 they're actually owned by the spender. The integrity and the chronological order of the block
 chain are enforced with cryptography.

★ Private & Public Keys

• A bitcoin wallet contains a public key and a private key, which work together to allow the owner to initiate and digitally sign transactions, providing proof of authorization.

Basic Framework

★ Bitcoin Miners

- Miners or members of the peer-to-peer platform then independently confirm the transaction using high-speed computers, typically within 10 to 20 minutes. Miners are paid in bitcoin for their efforts.
- People compete to "mine" bitcoins using computers to solve complex math puzzles. This is how bitcoins are created. Currently, a winner is rewarded with 12.5 bitcoins roughly every 10 minutes







- ★ A transaction is a transfer of value between Bitcoin wallets that gets included in the block chain.
- ★ Bitcoin wallets keep a secret piece of data called a <u>private key</u> or seed, which is used to sign transactions, providing a mathematical proof that they have come from the owner of the wallet.
- ★ The <u>signature</u> also prevents the transaction from being altered by anybody once it has been issued.
- ★ All transactions are broadcast to the network and usually begin to be confirmed within 10-20 minutes, through a process called mining.

Who Created Bitcoin

Who created Bitcoin?

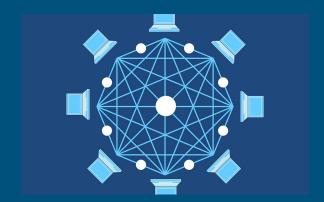
- ★ Unknown person by the name of Satoshi Nakamoto
 - o E-mail correspondence name
- ★ What is needed is an electronic payment system based on cryptographic proof instead of trust, allowing any two willing parties to transact directly with each other without the need for a trusted third party," wrote Satoshi Nakamoto the pseudonym of the mysterious bitcoin creator, who remains unknown in a white paper introducing the open-source technology.



Currency Decentralization

Bitcoin is decentralized:[8]

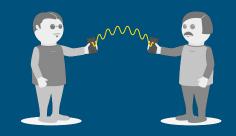
- Bitcoin does not have a central authority.
- There is no central server; the bitcoin network is peer-to-peer. [16]
- There is no central storage; the bitcoin ledger is distributed. [132]
- The ledger is public; anybody can store it on their computer. [7]:ch. 1
- There is no single administrator; the ledger is maintained by a network of equally privileged miners. It is no single administrator; the ledger is maintained by a network of equally privileged
- Anybody can become a miner. [7]:ch. 1
- The additions to the ledger are maintained through competition. Until a new block is added to the ledger, it is not known which miner will create the block. [7]:ch. 1
- The issuance of bitcoins is decentralized. They are issued as a reward for the creation of a new block. [107]
- Anybody can create a new bitcoin address (a bitcoin counterpart of a bank account) without needing any approval. [7]:ch. 1
- Anybody can send a transaction to the network without needing any approval; the network merely confirms that the transaction is legitimate



Bitcoin Exchanges

Getting Started





- ★ Many marketplaces called "bitcoin exchanges" allow <u>people to buy</u> or <u>sell</u> <u>bitcoins</u> using different currencies.
- ★ Coinbase is a leading exchange
- **★** Bitstamp
- **★** Bitfinex
- ★ Kraken





- Cryptocurrency exchanges. There are a number of exchanges in the U.S. and abroad. Robinhood is the first mainstream investment broker to offer bitcoin and other cryptocurrencies (Robinhood Crypto is available in most, but not all, U.S. states).
 - Other brokers such as Fidelity, Sofi Wealth, TradeStation and Motif Investing have announced plans to offer cryptocurrency trading in the near future. Other cryptocurrency exchanges include Coinbase, Binance and Bitstamp.
- ★ Bitcoin ATMs. There are more than 3,000 bitcoin ATMs in the U.S. (search Coin ATM Radar to find one near you).
- ★ Purchases: True to its original spirit, you can buy bitcoins directly from other bitcoin owners through peer-to-peer tools like Bisq, Bitquick and LocalBitcoins.com.
- ★ Bitcoin mining. You can earn bitcoins through mining, but the technical expertise required and computer cost puts this option out of reach for most.

What is a Wallet?

Bitcoin Wallet

- ★ Bitcoins are stored in a digital wallet which exists in a 'cloud' or your 'digital computer'
- ★ Hot wallet: Digital currency is stored in the cloud on a trusted exchange or provider, and accessed through a computer browser, desktop or smartphone app.
- ★ Cold wallet: An encrypted portable device much like a thumb drive that allows you to download and carry your bitcoins.
- ★ Basically, a hot wallet is connected to the internet; a cold wallet is not. But you need a hot wallet to download bitcoin into a portable cold wallet

Bitcoin Wallet



★ Payments & Transfers

- People can send bitcoins to each other using mobile apps or their computers. It's similar to sending cash digitally.
- Bitcoin when used on a mobile device allows you to pay with a simple two-step scan-and-pay. There's no need to sign up, swipe your card, type a PIN, or sign anything. All you need to receive Bitcoin payments is to display the QR code in your Bitcoin wallet app and let the other party scan your mobile, or touch the two phones together (using NFC radio technology).
- International Payments: Sending bitcoins across borders is as easy as sending them across the street. There are no banks to make you wait three business days, no extra fees for making an international transfer, and no special limitations on the minimum or maximum amount you can send.

Bitcoin Wallet



- ★ The wallet is kind of a virtual bank account that allows users to send or receive bitcoins, pay for goods or save their money.
- ★ There is no fee to receive bitcoins, and many wallets let you control how large a fee to pay when spending. Most wallets have reasonable default fees, and higher fees can encourage faster confirmation of your transactions. Fees are unrelated to the amount transferred, so it's possible to send 100,000 bitcoins for the same fee it costs to send 1 bitcoin.
- ★ Unlike bank accounts, bitcoin wallets are not insured by the FDIC

Is It Safe?

Bitcoin Security



- ★ Wallet in cloud: Servers have been hacked. Companies have fled with clients' bitcoins.
 - Security can be a concern: bitcoins worth tens of millions of dollars were stolen from Bitfinex when it was hacked in 2016
- ★ Wallet on computer: You can accidentally delete them. Viruses could destroy them.
- ★ Though each bitcoin transaction is recorded in a public log, names of buyers and sellers are never revealed only their wallet IDs. While that keeps bitcoin users' transactions private, it also lets them buy or sell anything without easily tracing it back to them.

Bitcoin Security



- ★ Bitcoin transactions are secured by military-grade cryptography. Nobody can take your money or make a payment on your behalf. So long as you take the required steps to <u>protect your wallet</u>, Bitcoin can give you control over your money and a strong level of protection against many types of fraud.
- ★ No one knows what will become of bitcoin. It is mostly unregulated, but some countries like Japan, China and Australia have begun weighing regulations. Governments are concerned about taxation and their lack of control over the currency.

Buying Bitcoin

Cons



- ★ Price Volatility. The 2017 spike in bitcoin's price was driven by speculators rushing into the bitcoin market, as NerdWallet staff writers discussed at the time. The recent gains are good news if you bought bitcoin this past December; those who bought in 2017 when bitcoin's price was racing toward \$20,000 have yet to recover their losses.
- ★ Hacking concerns. While backers say the blockchain technology behind bitcoin is even more secure than traditional electronic money transfers, bitcoin hot wallets have been an attractive target for hackers. There have been a number of high-profile hacks, such as the news in May that more than \$40 million in bitcoin was stolen from several high-net-worth accounts on cryptocurrency exchange Binance (the company covered the losses).
- ★ Limited (but growing) use. In May, telecommunications giant AT&T joined companies like Overstock.com, Microsoft and Dish Network in accepting bitcoin payments. But these companies are the exception, not the rule.
- ★ Not protected by SIPC. The Securities Investor Protection Corporation insures investors up to \$500,000 if a brokerage fails or funds are stolen, but that insurance doesn't cover cryptocurrency.

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Pros



- ★ Private secure transactions anytime with fewer potential fees. Once you own bitcoins, you can transfer them anytime, anywhere, reducing the time and potential expense of any transaction.
- ★ Transactions don't contain personal information like a name or credit card number, which eliminates the risk of consumer information being stolen for fraudulent purchases or identity theft. (Keep in mind, though, that to purchase bitcoins on an exchange, generally you'll first need to link your bank account.)
- ★ The potential for big growth. Some investors who buy and hold the currency are betting that once bitcoin matures, greater trust and more widespread use will follow, and therefore bitcoin's value will grow.
- ★ The ability to avoid traditional banks or government intermediaries. After the financial crisis and the Great Recession, some investors are eager to embrace an alternative, decentralized currency one that is essentially outside the control of regular banks, governing authorities or other third parties. (However, to buy bitcoin on an exchange with U.S. dollars, you'll likely need to link your bank account.

Getting Started



- ★ As a new user, you can <u>get started</u> with Bitcoin without understanding the technical details.
- ★ Once you've installed a Bitcoin wallet on your computer or mobile phone, it will generate your first Bitcoin address and you can create more whenever you need one.
- ★ You can disclose your addresses to your friends so that they can pay you or vice versa. In fact, this is pretty similar to how email works, except that Bitcoin addresses should be used only once.

Cryptocurrency Types

Most Traded Cryptocurrencies

- ★ Bitcoin
- **★** Ethereum
- ★ Ripple XRP
- ★ Litecoin
- **★** NEO
- **★** IOTA



Resources

Crypto Reading

What Is Bitcoin? CNN Money, August 2018

What is Bitcoin, and how does it work? NerdWallet, June 2019

Bitcoin.org - How It Works

Bitcoin: A Peer-to-Peer Electronic Cash System

What are the most traded crytocurrencies Plus 500 Worlds Trading Machine

The 10 Most Traded Currencies Other Than Bitcoin Investopedia, June 2020



