

Technology Trends

(Virtual) Money & Blockchain

Center for Learning in Retirement

CLR Fall 2020

Glen Maxson & Alan Freedman

Week 8

The What

- ~~Artificial Intelligence & Machine Learning~~
- ~~Robots & Drones~~
- ~~Autonomous Transportation Systems~~
- ~~Surveillance~~
- ~~(Cyber) Crime, Security & Warfare~~
- ~~Medical Tech~~
- ~~Media~~
- (Virtual) Money & Blockchain
- Communication
- Earth & Sky
- Space

Let's talk about

- Cryptocurrency, more specifically BitCoin
- Blockchain, and
- The Dark Net (again)

Introduction (1 min)



Cryptocurrency – What is it?

- A **cryptocurrency** (or **crypto currency**) is a digital asset designed to work as a medium of exchange that uses cryptography to secure its transactions, to control the creation of additional units, and to verify the transfer of assets
- Cryptocurrencies are a type of digital currencies, alternative currencies and virtual currencies
- Cryptocurrencies use **decentralized control** as opposed to centralized electronic money and central banking systems
- The decentralized control of each cryptocurrency works through a blockchain, which is a public transaction database, functioning as a distributed ledger
- Blockchain was invented by Satoshi Nakamoto in 2008 to serve as the public transaction ledger of the cryptocurrency bitcoin*

Who is Satoshi Nakamoto?

- **Satoshi Nakamoto** is the name used by the unknown person or people who designed bitcoin and created its original reference implementation. As part of the implementation, they also devised the first blockchain database. In the process they were the first to solve the double-spending problem for digital currency.
- The 'creator' of Bitcoin, **Satoshi Nakamoto**, is the world's most elusive billionaire (worth more than \$7B as of November 2017). Very few people outside of the Department of Homeland Security know Satoshi's real name. In fact, DHS will not publicly confirm that even THEY know.
- WIRED has obtained the strongest evidence yet of **Satoshi Nakamoto's** true identity. The signs point to Craig Steven Wright, a man who never even made it onto any Nakamoto hunters' public list of candidates, yet fits the cryptocurrency creator's profile in nearly every detail.



Cracked, inSecure and Generally Broken
The ravings of a SANS/GIAC GSE (Compliance & Malware) For more information on my role as a presenter and commentator on IT Security, Digital Forensics Statistics and Data Mining; E-mail me: [REDACTED]

Dr. Craig S Wright
GSE
Craig Wright
facebook

Name: Craig S Wright
Email: [REDACTED]
Status: None
Create Your Badge

SATURDAY, 10 JANUARY 2009
Bitcoin
Well.. e-gold is down the toilet. Good idea, but again centralised authority.
The Beta of Bitcoin is live tomorrow. This is decentralized... We try until it works.
Some good coders on this. The paper rocks. <http://www.bitcoin.org/bitcoin.pdf>
Posted by Craig Wright at [Saturday, January 10, 2009](#) 0:00

[Interview](#)

*Interesting Note: The **satoshi** is currently the smallest unit of the bitcoin currency recorded on the block chain. It is a one hundred millionth of a single bitcoin (0.00000001 BTC). The unit has been named in collective homage to the original creator of Bitcoin, **Satoshi** Nakamoto.*

Bitcoin: How Cryptocurrencies Work (9 min)



Bitcoin: How Cryptocurrencies Work

Features of BitCoin:

- No 'central' issuing authority or regulatory body
- 'Digital' currency using cryptography
- Exchange BitCoin in 'peer-to-peer' network
- Every transaction recorded on a distributed ledger called a 'blockchain'
- Secure through mathematical guarantees using private and public 'keys'
- Timing issue dealt with by 'solving math problems' – what 'miners' do
- Miners rewarded with newly minted BitCoin
- So what will cyptography do for us next?

Bitcoin Over Time

07/18/2010 to 10/30/2020

1h 12h 1d 1w 1m 3m 1y all



24 HOUR LOW

\$13,134.48

24 HOUR HIGH

\$13,663.25

ALL TIME HIGH

\$19,665.39



TOTAL SUPPLY

18.53M

1h 12h 1d 1w 1m 3m 1y all



Cryptocurrency Today ([source](#))

The crypto [market](#) has an estimated total market capitalization of over \$155 billion as of 15th March 2020. Following are some of the challenges hindering cryptocurrency growth and acceptance

1. [Big names of global trade](#) specialists are now moving towards Blockchain and once Blockchain technology takes off without crypto, it will be the end to it
2. Cryptocurrency still has a PR problem - cryptocurrency spells out new technology for age-old scams and frauds
3. Crypto and Blockchain have taken over a decade to adjust in an economy and society that operates on a system of laws, governments, and authorities designed to keep it limited amongst the powerful
4. Cryptocurrency is an emerging technology that is still immature in a system where other options that are widely scalable and accepted
5. Transaction issues include certain countries banning Bitcoin, conversion issues, people losing (lots of) money, price volatility...

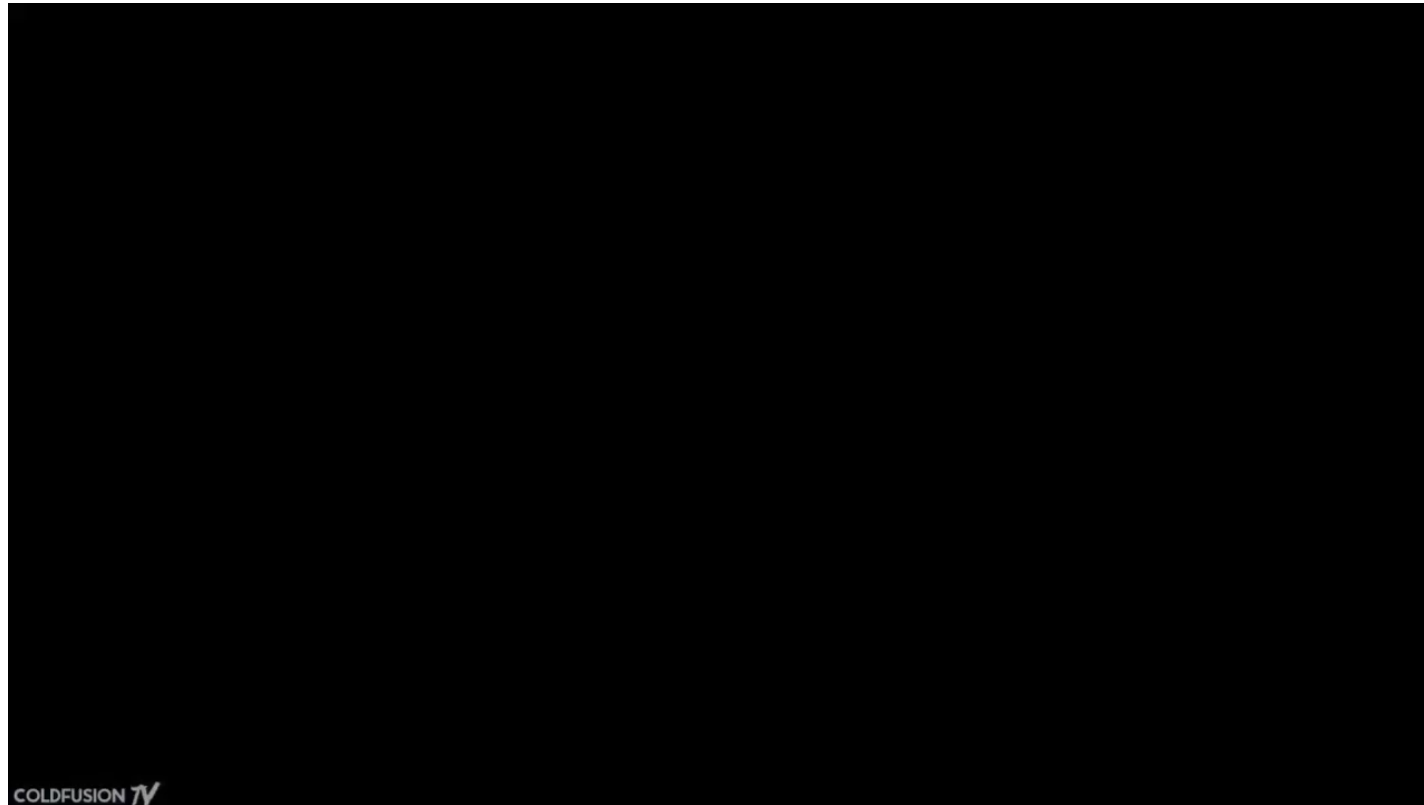
Stakes are high and the future unpredictable!

Alternate ([source](#))

Blockchain – What is it?

- A **blockchain**, originally **block chain**, is a growing list of records, called *blocks*, which are linked using cryptography. Blockchains, which are readable by the public, are widely used by cryptocurrencies. Private blockchains have been proposed for business use
- Blockchain is "an open, distributed ledger that can record transactions between two parties efficiently and in a verifiable and permanent way"
- For use as a distributed ledger, a blockchain is typically managed by a peer-to-peer network collectively adhering to a protocol for inter-node communication and validating new blocks

Why Blockchain Matters More Than You Think! (6.5 min)



Why Blockchain Matters More Than You Think!











- Bitcoin: Peer-to-peer financial system (a better way?)
 - Underlying technology – Blockchain
- Blockchain – “continuously update record of who holds what”
- Special type of data repository that’s ‘tamper-evident’*
- Application:
 - FITS (Fraud, Intermediaries, Throughput, & Stable Data)
- Traditional vs. ‘Smart’ Contracts
 - Trusted, fast, inexpensive, ‘virtual’...
- Issues: Malicious smart contracts, coding errors, permanence
 - Oracles?? AI + Blockchain = the future

*tam·per·ev·i·dent, *adjective* - (of packaging) designed to reveal any interference with the contents.

Traditional vs Smart Contracts

Traditional contracts

Smart contracts

 1-3 Days	 Minutes
 Manual remittance	 Automatic remittance
 Escrow necessary	 Escrow may not be necessary
 Expensive	 Fraction of the cost
 Physical presence (wet signature)	 Virtual presence (digital signature)

But Not So Fast

[Blockchains Are a Bad Idea \(James Mickens\)](#) – 6 min



Blockchains Are A Bad Idea: More Specifically, Blockchains Are A Very Bad Idea



James Mickens
Associate Professor of Computer Science,
Harvard SEAS



What Do Real Applications Need?

I need to know who you really are SO THAT I CAN SUE YOU

- Participants have out-of-band trust relationships *in real life*
- Real life trust relationships decrease the likelihood of malice!

Bitcoin-style anonymous identities are a bug, not a feature

I don't need cryptocurrency abstractions BECAUSE I WANT VISA AND THE GOVERNMENT TO BE ABLE TO RUIN YOU FINANCIALLY

- Disputes over payment shouldn't involve dude-bro disputes over whether to fork the blockchain

Most applications don't need the concept of an "in-app currency"

I don't need mining rewards because my reward for proper behavior IS NOT GETTING SUED

The number of readers may be large . . . but the number of writers is often small

- Interstate medical licensing: ~50 writers
- Supply chain management: hundred or thousands of writers, not millions

Arbitrary scalability is unnecessary!

Most applications don't involve virtual on-ledger commodities, but observations about the real world (e.g., who is licensed)

- So, ledger only needs to store observations (i.e., data), not "smart contract" code to enforce virtual commodity semantics
- The real-life semantics for observations are defined and enforced by higher-level software plus the legal system

A Modest Proposal

- Fast block generation under the threat of legal/reputational penalty
- Writers append dumb data, not smart contracts
- Use fast, well-known crypto to provide minimal ledger features
 - Tamper-resistance (signatures)
 - Non-repudiability (signatures) *
 - Ordering (hash pointers)
- Leverage commodity cloud storage

***Non-repudiation** is the assurance that someone cannot deny the validity of something.

What is the Dark Web, and why it's important?

- The **dark web** is the [World Wide Web](#) content that exists on [darknets](#), [overlay networks](#) that use the [Internet](#) but require specific software, configurations or authorization to access. The dark web forms a small part of the [deep web](#), the part of the Web not [indexed](#) by [web search engines](#).
- The darknets which constitute the dark web include small, [friend-to-friend peer-to-peer](#) networks, as well as large, popular networks like [Tor](#), [Freenet](#), [I2P](#) and [Riffle](#) operated by public organizations and individuals.
- The Tor dark web may be referred to as **onionland**, a reference to the network's [top-level domain](#) suffix [.onion](#) and the traffic anonymization technique of [onion routing](#).

[Jamie Bartlett: How the mysterious dark net is going mainstream](#) (6 min)

The TED logo is displayed in a large, bold, red, sans-serif font. The letters are thick and blocky, with the 'E' having a distinct horizontal bar.

Ideas worth spreading

Jamie Bartlett: How the mysterious dark net is going mainstream

- The Dark Net anonymous market
 - [TOR hidden services](#) - .onion accessed via the TOR browser
- Innovations from the Dark Net that matter for the rest of us
 - Payment system – BitCoin and other Cryptocurrencies
 - Multi-Signature Escrow Payments – neutral secure third digital wallet
 - Tumbling Service – micro-laundering system preserves anonymity
- Online Privacy
 - Distributing Computing + Powerful Encryption = better Privacy
- Dark Net going mainstream...?

Discussion

- Does this 'emerging' technology' have the potential to benefit everyone equally?
- What are its risks and rewards?
- Does it promote autonomy (self-determination) or dependence?

Bitcoin









































- [Bitcoin](#), created in 2009, was the first [decentralized](#) cryptocurrency. Since then, numerous other cryptocurrencies have been created. These are frequently called **altcoins**.
- The aim of Bitcoin was to create a **cryptographically secure currency that could be used as a form of universal cash** and replace all forms of fiat currency in the world.
- What was not expected was that because Bitcoin code was open source, people could create their own version of Bitcoin by replicating and tweaking the code to suit their own needs, in essence starting a new cryptocurrency.

How does it work - the basics?

- **Cryptocurrency can be thought of as a digital currency like PayPal or bank credit**
- **There are many other cryptocurrencies beyond Bitcoin**
- **Unlike bank credit, cryptocurrency is decentralized and thus not centrally controlled.**
- **Instead of a central power controlling cryptocurrency, an algorithm and users themselves control cryptocurrency.**
 - The algorithm dictates how transactions work and how new coins are created, users create peer-to-peer transactions, which are recorded on a public digital ledger.
- **Those who confirm transactions by breaking cryptographic codes are called miners.** Mining is a process that creates new coins.
- **But all you really need to do is set up a [Coinbase](#) account and use that to buy and sell Bitcoin, Ether, or Litecoin and to send and receive cryptocurrency.**
 - And remember to pay your taxes.

Top 20 Cryptocurrencies ([source](#))

Cryptocurrency Price List

#	Name	Price (USD)	Chg (24h)	Chg (7d)	Chg (30d)	Price (BTC)	Market Cap	Volume (24h)	Price Graph (7d)
1	 Bitcoin	\$13,498.22	-0.54%	3.28%	27.92%	1	\$250.15B	\$10.15M	
2	 Ethereum	\$381.85	-0.46%	-2.86%	10.26%	0.0283	\$42.96B	\$1.67M	
3	 XRP	\$0.23	-0.42%	-5.56%	0.73%	0.00001736	\$23.46B	\$283,791	
4	 Tether	\$1.00	-0.10%	-0.10%	-0.10%	0.00007415	\$10.93B	\$261,524	
5	 Bitcoin Cash	\$256.24	-0.47%	-1.40%	17.20%	0.01899	\$4.76B	\$154,372	
6	 Binance Coin	\$27.33	-1.83%	-12.01%	-3.12%	0.00203	\$4.25B	\$27,852	
7	 Cardano	\$0.09	-0.91%	-11.10%	-1.68%	0.0000068	\$4.13B	\$21,673	
8	 Polkadot	\$4.00	-0.92%	-15.02%	-1.72%	0.0002967	\$4.04B	\$2,668	
9	 Litecoin	\$53.61	-0.52%	-5.75%	17.67%	0.003975	\$3.55B	\$122,173	
10	 Bitcoin SV	\$157.53	-0.65%	-9.38%	-0.98%	0.01166	\$2.92B	\$33,423	
11	 USD Coin	\$1.00	0.01%	0.00%	0.00%	0.00007406	\$2.95B	\$7,806	
12	 EOS	\$2.43	-0.33%	-7.82%	-2.14%	0.0001798	\$2.48B	\$18,292	
13	 Uniswap Protocol Token	\$2.25	-0.40%	-17.18%	-42.46%	0.0001667	\$2.25B	\$89,299	
14	 Monero	\$117.99	-0.92%	-10.31%	13.74%	0.008539	\$2.09B	\$5,846	
15	 Huobi Token	\$3.73	-1.87%	-15.59%	-19.63%	0.0002761	\$1.86B	\$47,169	
16	 TRON	\$0.02	-1.35%	-10.05%	-11.11%	0.00000181	\$1.61B	\$69,898	
17	 Stellar	\$0.08	-0.48%	-7.33%	5.95%	0.00000558	\$1.57B	\$113,288	
18	 Wrapped Bitcoin	\$13,448.76	-0.14%	3.08%	27.32%	0.9976	\$1.59B	\$39,598	
19	 Tezos	\$1.89	-0.68%	-9.80%	-10.70%	0.0001399	\$1.53B	\$106,424	
20	 PlatonCoin	\$5.21	1.44%	-0.33%	0.00%	0.0001864	\$1.56B	\$1,348	

Top 5 (my list to watch)

- [Bitcoin](#) is likened to digital gold because it has a limited supply and can act as a store of value. It is censorship-resistant, pseudonymous, and an effective means of cross-border payments.
- [Litecoin](#) is one of the earliest cryptocurrencies, as well. It is a non-malicious fork of Bitcoin that gave it high transactions per second and a different mining algorithm. Litecoin is sometimes likened to silver in comparison to Bitcoin as gold. In history, silver was used more frequently for smaller transactions and gold was used less for larger sums.
- [Bitcoin Cash](#) is a fork of Bitcoin. Bitcoin Cash differs in certain technical elements that allow for more transactions per second on chain. Proponents think it is more important to function as payments system rather than as a store of value.
- [Binance Coin](#) is a utility coin that is integrated in the Binance crypto exchange platform. Investors and traders on Binance can use BNB for discounts on trading fees. It is a major trading pair and is featured on its new decentralized exchange.
- [Monero](#) is a privacy-centric cryptocurrency aiming to allow all transactions to be completely anonymous and untraceable. Monero uses highly technical cryptography, such as ring signatures and stealth address, to make it virtually impossible for third-parties to track. By obscuring all addresses and transactions, proponents say it makes for a more useful and fungible currency.

How does cryptocurrency work?

- Transactions are sent between peers from “cryptocurrency wallets” by matching up public codes which relate back to user-held private passwords (cryptographic “keys”).
- Transactions made between peers are recorded on a public ledger of transactions called a “blockchain.” All users of a given cryptocurrency have access to the ledger if they choose to download [a “full node” wallet](#) (as opposed to holding their coins in a third party wallet like [Coinbase](#)).
- The transaction amounts are public, but who sent the transaction is encrypted. Each transaction leads back to a digital “cryptocurrency wallet.” Whoever owns the password (or key) to the wallet, owns the amount of cryptocurrency denoted on the ledger.
- When someone sends or receives cryptocurrency, when they send from one wallet to another wallet using a set of private and public passwords, that transaction is queued up to be added to the ledger. Many transactions are added to a ledger at once.
- These “blocks” of transactions are added sequentially. That is why the ledger and the technology behind it are called “block” “chain.” It is a “chain” of “blocks” of transactions.

How does blockchain work?

- When a peer-to-peer cryptocurrency transaction is made, that transaction is sent out to all users with “full node” wallets.
- Specific types of users called miners then try to solve a cryptographic puzzle (using software) which lets them add a “block” of transactions to the ledger. Whoever solves the puzzle first gets a few “newly mined” coins as a reward. Sometimes miners pool computing power and share the new coins.
- The algorithm relies on consensus. If the majority of users trying to solve the puzzle all submit the same transaction data, then it confirms that the transactions are correct.

What is cryptocurrency mining?

- People who are running software and hardware aimed at confirming transactions to the digital ledger are cryptocurrency miners.
- Solving [cryptographic puzzles](#) (via software) to add transactions to the ledger (the blockchain) in the hope of getting coins as a reward is cryptocurrency mining.
- [Cryptocurrency mining in Iceland is using so much energy, the electricity may run out](#)

Where did it come from?

- There have been many attempts at creating a digital currency during the 90s tech boom, with systems like Flooz, Beenz and DigiCash emerging on the market but inevitably failing. There were many different reasons for their failures, such as fraud, financial problems and even frictions between companies' employees and their bosses.
- Notably, all of those systems utilized a Trusted Third Party approach, meaning that the companies behind them verified and facilitated the transactions. Due to the failures of these companies, the creation of a digital cash system was seen as a lost cause for a long while.
- Then, in early 2009, an anonymous programmer or a group of programmers under an alias Satoshi Nakamoto introduced Bitcoin. Satoshi described it as a 'peer-to-peer electronic cash system.' It is completely decentralized, meaning there are no servers involved and no central controlling authority. The concept closely resembles peer-to-peer networks for file sharing.

What can I do with it?

- In the past, trying to find a merchant that accepts cryptocurrency was extremely difficult, if not impossible. These days, however, the situation is completely different.
- There are a lot of merchants - both online and offline - that accept Bitcoin as the form of payment. They range from massive online retailers like [Overstock](#)* and [Newegg](#) to small local shops, bars and restaurants. Bitcoins can be used to pay for hotels, flights, jewelry, apps, computer parts and even a college degree.
- Other digital currencies like Litecoin, Ripple, and Ethereum aren't accepted as widely yet. But things are changing, with Apple having [authorized](#) at least 10 different cryptocurrencies as a viable form of payment on App Store.
- Users of cryptocurrencies other than Bitcoin can always exchange their coins for BTCs. Moreover, there are Gift Card selling websites like [Gift Off](#), which accepts around 20 different cryptocurrencies. Through gift cards, you can essentially buy anything with cryptocurrency.

Where can I get some?

How to Buy Your First Cryptocurrency Coin

- Buying cryptocurrency is confusing for a lot of people. It's not a stock or a typical "investment." It's not like anything most people have ever seen or experienced. You don't get shares; instead you get digital coins or tokens.
- For most people in the U.S., [Coinbase](#) would be the easiest option to buy Ethereum, Bitcoin, or Litecoin. After verifying your account, you can add a number of payment methods including credit or debit cards, U.S. bank accounts, or even wire transfers of funds. Other options for exchanges that will take U.S. dollars for coins are [Kraken](#), and [Gemini](#) in the U.S
- If you are looking for some of the newer coins like NEO that are making big movement but haven't made their way to the aforementioned exchange sites, you can look into Bittrex, Poloniex or Livecoin. You can transfer Bitcoin or Ethereum to these platforms from Coinbase and then exchange it for any other digital currency that you want.

Where can I store it safely?

- Unlike most traditional currencies, cryptocurrencies are digital, which entails a completely different approach, particularly when it comes to storing it. Technically, you don't store your units of cryptocurrency; instead it's the private key that you use to sign for transactions that need to be securely stored.
- There are several different types of cryptocurrency wallets that cater for different needs. If your priority is privacy, you might want to opt for a paper or a hardware wallet. Those are the most secure ways of storing your crypto funds. There are also 'cold' (offline) wallets that are stored on your hard drive and online wallets, which can either be affiliated with exchanges or with independent platforms.
- [*Bitcoin Wallets for Beginners: Everything You Need to Know*](#)

What is a wallet?

- Cryptocurrency wallets are software programs that store your public and private keys and interface with various [blockchain](#) so users can monitor their balance, send money and conduct other operations.
- When a person sends you [Bitcoins](#) or any other type of digital currency, they are essentially signing off ownership of the coins to your wallet's address.
- To be able to spend those coins and unlock the funds, the private key stored in your wallet must match the public address the currency is assigned to. If public and private keys match, the balance in your digital wallet will increase, and the senders will decrease accordingly.
- The transaction is signified merely by a transaction record on the [blockchain](#) and a change in balance in your cryptocurrency wallet

Different types of wallets

- Wallets can be broken down into three distinct categories – software, hardware, and paper.
- (Software) **Desktop** wallets are downloaded and installed on a PC or laptop. They are only accessible from the single computer in which they are downloaded.
- (Software) **Online** wallets run on the cloud and are accessible from any computing device in any location. While they are more convenient to access, online wallets store your private keys online and are controlled by a third party which makes them more vulnerable to hacking and theft.
- (Software) **Mobile** wallets run on an app on your phone and are useful because they can be used anywhere including retail stores. Mobile wallets are usually much smaller and simpler than desktop wallets.
- **Hardware** wallets differ from software wallets in that they store a user's private keys on a hardware device like a USB dongle. Although hardware wallets make transactions online, they are stored offline which delivers increased security. Users simply plug in their device to any internet-enabled computer or device, enter a pin, send currency and confirm.
- **Paper** wallets are easy to use and provide a very high level of security. The term refers to a piece of software that is used to securely generate a pair of keys which are then printed. Using a paper wallet is relatively straightforward. Transferring Bitcoin or any other currency to your [paper wallet](#) is accomplished by the transfer of funds from your software wallet to the public address shown on your paper wallet. Or if you want to withdraw or spend currency, all you need to do is transfer funds from your paper wallet to your software wallet. This process is referred to as '**sweeping**.'

Sources

- [What is Cryptocurrency. Guide for Beginners](#)
- [Cryptocurrency](#)
- [10 Incredible Uses for Cryptocurrency and Blockchain You Probably Haven't Thought of](#)
- [How Does Cryptocurrency Work?](#)
- [How Does Cryptocurrency Work? \(for Beginners\)](#)
- [Cryptocurrency and E-money: How does the transaction work?](#)
- [How to Buy Cryptocurrency](#)
- [How to Buy Your First Cryptocurrency Coins \(Ethereum, Bitcoin, Litecoin, and NEO\)](#)

Sources

- [How To Invest in Cryptocurrencies: The Ultimate Beginners Guide](#)
- [Cryptocurrency Wallet Guide: A Step-By-Step Tutorial](#)
- [Evolution of Cryptocurrency: The Problem With Money Today](#)
- [Evolution of Cryptocurrency: What is Cryptocurrency?](#)
- [What are the regulatory issues facing cryptocurrency developers?](#)
- [Cryptocurrencies have an everything problem](#)
- [Major Problems in the Cryptocurrency Market](#)
- [Problems and risks of cryptocurrencies](#)
- [4 Cryptocurrency Trends to Watch in 2018](#)

Sources

- [How Two Unexpected Factors Will Drive What's Next In Cryptocurrency Trends](#)
- [Looking Ahead: 12 Cryptocurrency Trends Ready To Explode In 2018](#)
- [Cryptocurrency like bitcoin is easy money for criminals](#)
- Misc References <https://charts.bitcoin.com/>
 - [bitcoin and blockchain: what math puzzle do miners actually solve? example with real transactions](#)
 - [Cryptocurrency mining in Iceland is using so much energy, the electricity may run out](#)
 - [Scientists at Russian nuclear research facility arrested for mining cryptocurrency](#)
 - [South Korea Responds To Cryptocurrency Petition](#)
 - ['Satoshi' Craig Wright Is Being Sued for \\$10 Billion \(update\)](#)
 - [Uber co-founder Garrett Camp is creating a new cryptocurrency](#)
 - [Bitcoin Resources](#)

Recent Articles

- [Wyoming Takes Another Step To Become the Cryptocurrency Capital of America](#)
- [President Trump Prohibits US Exchange of Venezuelan Cryptocurrency Petro](#)
- [Cryptocurrencies Featured In Congressional Report](#)
- [No, The Mt. Gox Sell-Off is Not to Blame for Market Dip](#)
- [This year's SXSW was all about blockchain dreamers, cryptocurrency scammers, and everything in between](#)
- [BlockCAT Launches "Error-Proof" Ether Transactions With Tabby Pay](#)
- [Bitcoin Drops to Month Low After Google Bans Crypto Advertisements](#)
- [PayPal CEO Says Cryptocurrencies Are Just an Experiment for Now](#)
- [Reaction to Turbulent Week in Crypto Markets](#)
- [Japan to punish several cryptocurrency exchanges: sources](#)
- [Want To Make Millions? Copy Someone's Cryptocurrency Project](#)
- [This Is What Happens When Bitcoin Miners Take Over Your Town](#)
- [Bitcoin Is Ridiculous. Blockchain Is Dangerous](#)
- [Japan to punish several cryptocurrency exchanges: sources](#)
- [CryptoKitties Come of Age With \\$12 Million in Venture Funding](#)
- [Santander Partners With Ripple to Create a New Cross-Border Payment App](#)