

CRYPTOCURRENCY MINING

The Beginner's Guide to Mining
Cryptocurrency Coins, How to Start,
Mining Rigs, ASIC, the Best Coins to Mine



Jared Benson

Cryptocurrency Mining

*The Beginner's Guide to Mining Cryptocurrency
Coins, How to Start, Mining Rigs, ASIC, Main
Coins to Mine*



by Jared Benson



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Introduction

Congratulations on downloading this book and thank you for doing so.

The following chapters will discuss some of the basics that you need to know to get started with mining cryptocurrencies. This is a great process to work with. It not only helps the cryptocurrency networks to do well and keep user information safe and secure, it can also be a good way for the miner to make a small income from their work.

If you are interested in learning more about mining and making money in this way, make sure to read through this guidebook to help you get started.

This guidebook is going to take some time to discuss mining and how to get started. You will learn some of the basics of mining, such as how to get started and if it is worth your time, what tools you need to get started, some of the common issues that can come with mining, and some of the risks and benefits of getting started with mining.

When you are done with this guidebook, you will be able to pick out the best currencies to mine and can start making money in no time.

If you have been considering mining to invest in cryptocurrencies, then make sure to read through this guidebook to help you learn exactly how to get started.

There are plenty of books on this subject on the market, thanks again for choosing this one! Every effort was made to ensure it is full of as much useful information as possible, please enjoy!

Chapter 1: What is Coin Mining?

Cryptocurrencies have started to change the way that people send and receive money and even the way that they invest their money. These currencies have taken over the world, allowing people to make purchases all over the world and making it easy to stay anonymous. With all the benefits that come with these currencies, it is no wonder that they are growing so much and that so many people are interested in using them in their daily lives.



Why are digital currencies so popular?

There are so many reasons that these digital currencies are growing so much. And as these currencies continue to grow, the work of the miners will become even more important because they are needed to help keep the network functioning properly.

One of the first reasons that people are flocking to these digital currencies is that they can keep their personal information private and secure. Through the blockchain and the work that the miners do on these networks, they can send and receive payments without anyone else knowing who they are. In our digital age, it is a constant worry that someone will be able to steal your personal information any time that you go online. But with cryptocurrencies, this is not going to be as big of an issue.

Others like to work on these networks because there isn't a central authority that is controlling how the money works. With all the economic issues that came about in 2008, there are many people who are worried about how well the government can handle their money and keep it safe.

These online currencies are based on complex mathematical equations and can't be controlled by one person. There is usually a limited amount of coins

available and it is the work of the miners to slowly release more into the network for the users.



Other benefits of using a digital currency include transactions that can be done in a few minutes (rather than a few days), low transaction fees, ability to send and receive money all throughout the world, and so much more. Compared to using a fiat currency, these cryptocurrencies are much easier to work with and provide so many benefits to everyone who decides to use them. For these currencies to work, though, there needs to be a level of security present inside of them. This is where the miners will come into work. As a miner, you will be responsible for helping provide this kind of security. Miners will take the transactions that are available on the blockchain and give them a nice code to keep the information safe. While anyone can look at the blockchain and check that nothing has been messed with (thanks again to the work of the miners), these unique codes make it much harder for others to see your personal information and use it against you.

The basics of coin mining

When it comes to mining cryptocurrencies, you will find that it is an arms race. And to be honest, it is the early adopters who are going to make the most money. Those who wait until a currency becomes popular are going to have so much competition, and a lot of costs to deal with, that it is a lot harder to make money.

You have heard about Bitcoin, the first of these cryptocurrencies that was originally released in 2009. Ever since that one came out, there have been many other digital currencies that have come into the market, including Bit-

coin Cash, a spinoff of Bitcoin. With all these options, it is sometimes hard to figure out which one is the best and will provide you with a good return on investment.



If you had started with the mining process of Bitcoin in 2009 or shortly after, you would easily own thousands of dollars right now. This would be even truer if you left your coins in the market for a bit of time and let the value increase. However, there were also lots of ways that you may have lost some money in the Bitcoin mining market by this time as well.

For those who are looking to get into cryptocurrency mining market on a small scale, then Bitcoin is not really the best choice to go with. The maintenance costs and the investment that you need to make upfront will be enough to turn a lot of people away from mining.

In addition, the mathematical difficulty of being a Bitcoin miner makes it really hard to earn money from this process. At this time, if you would like to make money with Bitcoin mining, you will either need to join in with another group to share the cost or leave it for the large-scale operations to do the work.

However, there are a lot of other digital currencies that you can choose from. Some like Feathercoins, Dogecoins, and Litecoins are three other cryptocurrencies that are much better for beginners. For example, based on the current value of Litecoin, someone could earn between 50 cents and 10 dollars each day using a consumer level mining hardware. When you are working with Feathercoins and Dogecoins, these yield a little less profit while using the same mining hardware, but they are becoming more popular and will provide you with more profit in the future. Peercoins is another currency that can

provide you with a decent return on investment based on the time and costs that you need to make it happen.

The biggest issue with mining is that when more people join the cryptocurrency market, your choice is going to get more difficult. The more people who are in a currency, the more expensive the hardware will be that you will need in order to discover coins. You can either invest heavily to keep mining on that same currency, or you may have to learn how to mine a different currency to keep your costs low.

How do I mine?

Each currency that you work with is going to have some different rules for how you are supposed to get the mining process done. Some are going to be more complicated than others, but you can choose which currency you work with to determine how much work you will need to do.



The work of the miners, no matter which currency they choose to work with, is based on the blockchain. Blockchain technology helps to run most cryptocurrencies and keeps it safe and secure by keeping track of all the transactions that occur on the network. Any time that you send or receive a payment on one of these networks, you will be able to look on the blockchain and see it show up within a few minutes.

There are many different types of blockchain platforms out there, which is one of the ways that the currencies can differentiate each other.

Plus, this blockchain can be used in many other industries since the ledger is designed to hold anything of value. From the insurance industry to banking and so much more, blockchain is growing all over the world.

But, when it comes to mining, it is important to learn how to work with this

blockchain. When a user joins a cryptocurrency network, they will receive a unique address that will label them on the blockchain, making it easier to see which transactions they have completed on the network.

In addition, the user is going to receive an individual chain that they can fill up with all their transactions. Each chain will be able to hold a specific number of transactions, so the length of time it takes to fill up the chain depends on how active the user is on the network.

Once the chain is done, it needs to join the user's individual blockchain as well as the permanent blockchain for the network. Before this can happen, though, the miners need to get to work.

If the chain joined the blockchain right away, all the personal information of the user would be present on it. This would make it is easy for a hacker to see the information and steal it from the user. And if this could happen, it would be little harder for users to trust the network.

To help keep the personal information of the user safe and secure, the miners are going to work with the chains to make them secure. They will do this by taking the information found on the chains and changing them into some unique codes. The information will then be hidden away from others, and if the code is done the proper way, anyone on the network will be able to tell if someone has gotten on and tried to mess with the transactions.

Now, each cryptocurrency is going to have different requirements for how the code needs to be written. You can't write out whatever code you want, or else everyone would become a miner and all the coins would be used up in no time. To keep it simple, let's look at what you will need to do so that to make a code for each of the chains.

For the start, you need to have a specific number of zeroes at the beginning of the code. If the transaction doesn't work for this, miners can bring in some more information to get it to work, if it doesn't change the core information that is found in the chain. You also need to have a random code of letters and numbers that are dependent on each other. This means that if one character

is changed in the code, it is going to change all the other ones.

The chain also needs to match up with the rest of the blockchain.

If one thing changes in your new chain, it also needs to change all the characters that are found in the blockchain ahead of it as well. This can make it more difficult, but then if someone goes through and changes something in the blockchain, anyone would be able to notice because of the mess in the code.

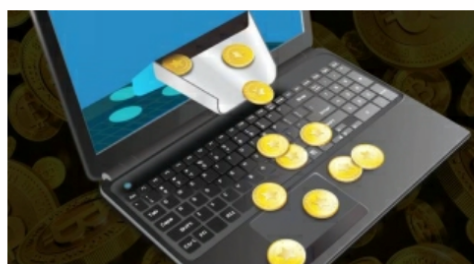


As you can see, there is a lot that comes with creating a code for each chain. That is why mining can be so profitable. The more the currency is used, the harder it becomes to work on the code, so you will need more technology and work to create one of these codes. Learning how to mine a new currency and getting in on the ground floor can be the best way for you to make the most money out of mining.

Is it worth my time to mine?

There are some costs that come with mining these currencies. You will not be able to use your regular computer to make it happen. You need a special computer, special hardware, and so much more.

This means that you will need to come up with some money upfront in order to see success with mining these digital currencies. With all these costs, you may be worried about whether it is worth your time to mine these currencies or not.



As a hobby, mining in crypto coin can help you to earn a small amount of

money each day. With some of the digital currencies that we talked about above, you may be able to make a few dollars each day. If you figure out a currency that will keep the costs as low as possible, you could recoup some of your costs within a year or so.

However, it is hard to use mining to bring in a second income. For most people who are not able to afford a good amount of equipment and who don't have a ton of technical knowledge, this is not going to be a reliable way to make a good amount of money.

To see a good amount of profit, you must be able to invest up to \$5000 in hardware costs before you even get started. If you can do this, you could earn more than \$50 each day. A lot of people are not willing to pay this much upfront so that to get started, so it is not necessarily a good option for most people.

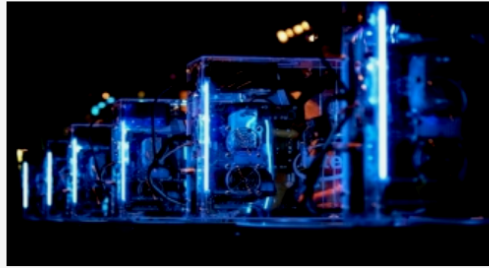
Set expectations that are reasonable

If you go into mining to earn a second income, then you will be disappointed in the mining process. With this as your goal, it is much better for you to purchase some of your chosen digital currency and then invest it to see results. If you would like to help the digital currency market and earn a few dollars in the process, then mining may be the best option for you.

As a miner, you need to make sure that you can keep your costs as low as possible. It is best if you can

keep the cost of your electricity own to \$0.11 per kilowatt hour. You should also find a good strong computer that can keep up with it and find some software that will help you do the work. The lower you can keep your costs, the more of the mining income you will be able to keep in your pocket.

Remember that you also need to come up with some upfront costs. For example, you need to invest in 4 AMD Radeon graphics processing units and 4 ASIC processors just to get started. You also need to consider the value of the digital currency that you would like to use.



To help keep your expectations in check, it is a good idea to run some numbers. Figure out how much money it is going to cost you to get started with mining a currency and for all your upfront costs. Then figure out how much money you can make from these currencies. This will give you an idea of whether it is worth your time to even get started with this currency and gives you a good idea of how much you will be able to make each day.

Now, there is sometimes a chance that the digital currency you choose will jump in value quite a bit at some point. If this happens and you are mining, you could end up with thousands of dollars in currency.

However, this is a small chance, but when you take the time to look through the currencies and you find a good one, it could happen.

If you do decide to go with mining in digital currencies, it is best to have realistic expectations. It is a better to do this as a hobby that provides you with a small income rather than working it as a full-time income. And, make sure that you do your research to ensure you don't fall in with a scam currency.

How the mining process works



For this, we are going to focus on mining script coins such as Feathercoins, Dogecoins, and Litecoins. There are three main goals that mining is meant to focus on, including:

- Provide some bookkeeping services to the coin network. With mining, you are basically getting 24/7 computer accounting services, which on the network are known as verifying transactions.
- The miner will get paid a small reward for their accounting services. They will receive a fraction of the coins every few days.
- As the miner, you need to be able to keep your personal costs down, including the costs of your hardware and your electricity.

What you need to get started



While we will talk about the requirements later on, let's look at some of the basics that you need to get started with digital currencies. The main things that you will need in order to get started with some currencies like Feathercoins, Dogecoins, and Litecoins include:

- A coin wallet. This is where you are going to place all of your earnings when you are successful. You can then exchange them out for your fiat currency whenever you would like.
- Mining software package: This will make it easier for you to get started with the mining process. There are several free ones that you should consider keeping your costs down.
- Join a mining pool: The mining pool is a community of miners who will combine their computers together to come up with the codes needed for mining. This provides more income stability than doing it on your own.
- Membership in an online currency exchange: This allows you to change out the virtual coins for conventional cash.

- **Good internet connection:** You do not want to be in the middle of doing a code and then have the internet go down. It is best to go with 2 megabits per second or faster speed for the best results.
- **Dedicated area to work:** This would ideally be in your basement, but make sure the area is cool and can be air-conditioned.
- **A good computer:** You could use your regular computer to do it, but then it would be hard to use the computer for anything else. It is ideal to have a separate computer that is dedicated to doing the mining work.
- **ATI graphics processing unit:** The cost for this is going to be about \$3000 for each new chip. This is basically the workhorse for the mining work and accounting services that you are trying to do.
- **House fan:** Mining can be rough on your computer. Having a fan on the computer will make it easier to keep your computer cool so it doesn't become overheated.

Three top mining methods

As a beginner, you need to make sure that you find an effective method that will help you to mine and earn coins. There are a lot of different methods that you can choose from, but let's look at some of the most popular methods that you can work with.

Using an app

This is one of the easiest ways to start mining. There are several apps that will do the work for you. For example, if you would like to work with Bitcoin, the Bitcoin Miner with Windows 10 can help you to get started. Once the app is downloaded, you will just need to enter your wallet address and then press the start button.

Of course, the more powerful the device is, the more transactions you will be able to complete with this kind of application. Take some time to look through the different applications that you can use based on which currency

you are working with. Some of these can be scams and are not the safest to use, so always look for the legitimate apps to use.

Mine in the cloud

Another option that you can use is to pay someone else to do the work for you. This is known as cloud mining.

To get started, you would need to sign up for an account on a cloud mining website and then you will pay them to mine Bitcoin and some other currencies for you.

In most cases, the more money that you pay into this site, the more your account will mine.



When you sign up for a site, you are going to enter into a cloud mining contract. Some of these last for at least a year, although some of them can last indefinitely. When the currency is mined for you, it is going to be sent to your chosen wallet address on a regular basis.

This is a good way to make a residual income on a weekly basis. You do need to make sure that you are picking out a good cryptocurrency so that when it is mined, it will go over your initial payment.

Genesis Mining is one of the best cloud mining companies that you can use. It mainly offers Bitcoin mining, but it is opening up to use Monero, Ethereum, and Litecoin as well.

Building your own mining rig

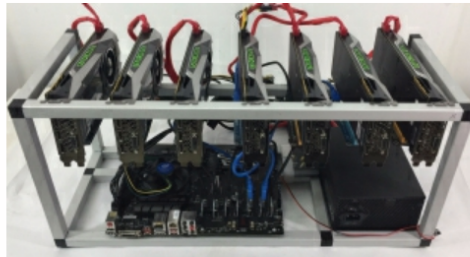
If you are really interested in investing in the mining process, it may be a good idea to purchase an ASIC hardware device, which is often known as a mining rig.

These are basically just processors that are designed for mining various digital

currencies and they are made to run non-stop all day, every day. These are very expensive, costing several thousand dollars.

Plus, running one of these devices can consume a lot of electricity. With all the costs, it could take you more than a year of successful mining before you can turn a profit.

When you are using the ASIC mining device, you must also download some advanced mining software and then enter in to a mining pool.



This software is important because it will tell your ASIC device what it needs to mine, where to mine, and who to send the coins to when it is done. The mining pool is important because it is a group of miners that will work together so that to make a stable income with mining.

This is a method that you would use if you really want to turn a big profit in mining. But it can be expensive to get started with and you must be very serious before you go with it.

There are a lot of different aspects that come with the mining process. This process allows you to earn a small income while helping the network of your chosen cryptocurrency.

It can be expensive, and it is hard work to accomplish, but for those who are looking to make a nice side income or who would like to jump on before the currency really gains steam, this is a good way to go.



Chapter 2: The Risks and Benefits of Coin Mining

There are a lot of reasons that you should consider mining in digital currencies. You can help the currency network that you choose to work with. You can make a little bit of money in the process and you can even see that profit rise if you hold onto the coins and the currency gains value. But despite of the benefits that come with mining coins, there are some risks to mining in currency that you should be aware of. Before you decide to join the coin mining world, it is important to know both the risks and the benefits of working with these coins. Let's look at both sides so you can make an informed decision.

The benefits of coin mining

There are a lot of benefits to getting started in coin mining, which is why so many people want to get into the game. The first benefit is that this process helps the cryptocurrency network to be safe.

The miner oversees coming up with complex mathematical codes that will protect the information that goes through the network. This helps the blockchain to be more secure and can build up trust with those who use the network. Without the work of the miners, it is not likely that these currencies would grow as much because no one would trust the network.

Another benefit is that the work of the miners helps to release more coins into the network. Many cryptocurrencies, including Bitcoin, have a limited amount of coins that are created to be used on the network. Even those who have an unlimited amount of coins will only release a few at a time. Keeping the numbers limited helps to keep the network steady. But as more people get on the network, it makes sense that more coins will be released.

When the miners finish their work on the network, they will be rewarded with a few coins that are released. The amount will depend on which currency they are working with. The miners can either use the coins to make purchases or they can invest the coins. Either way, the coins have now been released into the market and helps that network to grow.

And of course, the main benefit of working with mining is that the miner can earn an income from their work. Most of the coins will not make you rich with your work, but you do get a little bit of a reward for the work you are doing. Over time, especially if the currency ends up growing in value, you could end up with a nice little profit to work with.

The risks of coin mining

While there are many great benefits that come with coin mining, there are also some risks that you will need to face.

The biggest risk is that it will cost you more to mine the coins than you will earn. Mining takes a lot of equipment and a lot of electricity to get started with. This can easily cost you money that you are not able to get back. It is up to you as the miner to determine if the coin is going to bring in enough money to cover your costs and bring you a little profit in the process.

If you decide to purchase all the latest equipment to get started with mining, then you must pick out a currency that will bring some of that money back to you. Some coins can be profitable, but others are too much work and will cost you more than you can make. Before you decide to jump into the mining business, sit down and figure out how much it will cost to do the mining, and how much you think you will be able to earn.

Another risk is that you pick out a coin that is worthless. There are many different types of currencies that are available to pick from, but not all of them will be profitable. If you pick out a currency that no one likes, or you go with one that ends up failing shortly after you join, all your profit will not be worth anything and you will spend more than you make.

It is important to do your research before you join a new currency network and start mining. You need to go with a currency that is easy to use, won't cost you too much to get started with, and will stick around for a long time. Look for currencies that are still lower in price as well, but which have some potential to grow in the future, so your earnings will grow over time.

And of course, you must make sure to watch out for scams when they

happen. With the digital currency market growing like crazy, there are many scammers out there who will try to get your money.

These individuals may just want your personal information, or they may be interested in getting you to purchase a specific software that is “meant” to help you out with the mining process. Either way, you will end up losing out on all your money and not making anything.

Mining in cryptocurrencies can make you a lot of money if you do the process properly.

These currencies are very popular and as time goes on, and more people join the different networks, your profits are sure to grow.

But before you join a network, you must make sure that you are picking out a currency that is good and that you are going to be able to make a profit from the work you do.

Chapter 3: What You Need to Have to Get Started

If you have read through the information in the rest of the guidebook and you still feel like mining is the right choice for you, then you are ready for a great adventure. For the right person, mining can be a great way to challenge yourself, to learn more about the cryptocurrency market than anyone else can, and a good way to make some money.

Before you get into mining, you need to have a few items in place to help. You will find that joining with your regular computer, for example, is not the best way to earn a good profit with mining. You need a specialized computer, unless you want to never use your regular computer again, as well as a wallet to hold your coins, a good processor, and some motivation to get the work done. Let's look at some of the other things that you will need in order to get started with mining cryptocurrencies.

The hardware

The first thing we will look at is the hardware. To begin, you will need to get a mining hardware. When these currencies began, it was possible to use your own computer and a high-speed video processor card in order to mine.

But thanks to how popular these have gotten recently and how hard the equations are now, it is no longer possible to do this. When it comes to the mining industry, especially when we are talking about Bitcoin, you may need to use some customer Bitcoin ASIC chips because they offer performance that can be more than 100 times that of some older systems.

It is a good idea to get a good ASIC chip to help with your mining. Using an older system or missing out on this part means that you will use up more electricity than you would be able to earn.

Best mining services

Another option that you can use is to purchase a cloud mining contract. This is going to simplify the process, but it can increase the risk since you are not going to be the one who controls the physical hardware. Let's look at some

of the most popular cloud mining services for Bitcoin that you may want to consider:

- **Genesis Mining Review:** Genesis is the largest Bitcoin provider and has expanded out to script cloud mining as well. There are three plans for mining Bitcoin and it is priced reasonably for most people to start. They are also working to make Zcash mining contracts for users.
- **Hashing 24 Review:** This company has been working with Bitcoin mining since 2012, so it has some history to back it up. They use some modern ASIC chips to provide the best performance and efficiency that they can.
- **Minex Review:** Minex is an aggregator of blockchain projects that are presented in a game format. Users will be able to purchase Cloud packs that can be used to build up an index from a pre-picked set of cloud mining farms, real-world markets, casinos, and lotteries.
- **Epbot Review:** This is a good one to use if you need to save money while getting started. You can start with the cloud mining process for about \$10, and you can break even pretty quickly.

Mining hardware

You also have to consider the type of hardware that you would like to use. There are a lot of options, but you need to balance out the cost and efficiency of the hardware with how much you can earn. The containers are a good option. AntMiner S7 can help you earn about 0.1645 Bitcoin each month and will cost under \$480 for the product while the AntMiner S9 can provide you with 0.3603 Bitcoin on average each month for a cost under \$2000. Another option is to go with the Avalon6 which will provide you with an average 0.1232 Bitcoin each month for about \$500.

It is often about picking the one that is the best price for how much you can

earn. Most of the hardware is going to cost you a little bit so get ready to come up with this as your start-up cost.

You also need to make sure that you are picking out a good system that can help you to do the work. If you plan to do this on occasion and you are using one of the smaller cryptocurrencies, you may be able to get away with using your own personal computer. However, if you are serious about getting into mining, you need to consider a much better computer. Pick one that has good speed, has a good graphics card, and will be able to support the software that you need. This may cost a bit, but you do not want to go cheap on these or you will miss out on some great opportunities to earn money.

The software

If your head is reeling a bit from the costs in the past section, then this one is going to be a bit nicer. Once you have been able to choose the mining hardware that you want to use, it is time to download the mining software. Most mining software is going to be free to download, even that which is used to mine Bitcoin. There are quite a few options that you can make, so search around and find the one that can do the work the best. Two popular options that Bitcoin users like include BFGminer and CGminer, which are considered line programs.

If you would like to work with the GUI because it is easier to use, then EasyMiner can be a good option. This option is going to work out well with Android, Linux, and Windows programs so keep this in mind when you set it up.

Join a mining pool

There are some miners who choose to do all the work on their own. They spend a lot of money to get all the hardware and other things that they need, and then they do the work by themselves. This has the benefit of providing you with a bigger profit when you solve one of the codes. But with all the

competition out there for competing for the codes, it is likely that, without joining a mining pool, you could spend a long time working on the codes and never making any profit.

It is often best to work in a mining pool. These pools allow you to make a good income in mining by working with others who share the same goal as you. You will receive one part of the mathematical equation to work on, and then others will work on the rest. Once you get a successful code, everyone who worked on the code will share in the profit.

This method provides you with a steadier source of income compared to doing it all on your own. It is much faster since you can work on it together with other people. You also won't have to use up as much power and electricity in your own home since everyone is sharing in. No, you won't get the full amount like you would when you do the work on your own, but you are more likely to get paid something when you work in a mining pool.

Set up your wallet

If you want to get paid after successfully completing the work of a miner, then you need to set up a wallet. There are many wallet options out there and it will often depend on the type of currency that you are working on for which one you will choose. There are some that are specific to just a few types of coins and others that can be used for a variety of ones. Make sure that you are picking out a wallet that is easy to use and known to be secure and safe. You do not want a hacker to get ahold of your wallet information and then steal all your coins while you are working.



When you sign up for a wallet, you will receive a unique address that is yours to use. If you can pick out your own address, make it something that no one

else can link back to you to help with keeping your privacy. You can use this address to make sure that you get your coins when you are all done mining.

News resources

As a miner, it is important that you learn how to stay up to date with all the news regarding your digital currency of choice. This can help you to figure out if the coins are still a good one to go with or if you need to switch out because it is going to start losing value. There are a lot of different news sources that you can go, such as the WeUseCoins news section. Check up on this on a regular basis so you know what is going on with your currency always.

A dedicated spot to do the work

Some people find that so that to successfully mine, they need to set up a spot that is just for their mining equipment. If you are serious about doing the mining, then this is critical to help you see results. First, it is nice to have a computer that is just for the mining work that you do.

This makes it easier for your mining rig to run all the time and can increase your profits. You can use the same computer for mining and for personal use, but it can cause some hassles that you probably don't want to deal with.

In addition, you most likely want to pick out a place that is dark and can be kept cool. Your mining rig is going to make the computer run warm and if you leave the computer somewhere that it is already warm, you could run into issues with the computer overheating. Most people choose to leave their mining rig in the basement where it can stay nice and cold. You may also want to consider leaving a nice fan in the room as well to give the computer some extra protection.

Getting started with mining is serious business. It can take a lot of time and dedication and you will need to take the time to purchase various equipment if you want to see success in this endeavor. But when all the parts come together, you will be able to make a good profit with the help of mining.

Chapter 4: Top Currencies to Mine

This guidebook has spent some time talking about mining and all the different tools and knowledge that you need to get started with this process. There is quite a bit of work that comes with mining, but it can also provide a good deal of profit to those who are ready to dedicate their time to get it all done. There are many currencies that you can choose from that allow for mining and give you the opportunity to make a good profit. But since it can cost you a little bit to get started and for the electricity to compete in mining, you will want to ensure that you are picking out currencies that are worth your time. Some currencies, unless you are a big company that can handle all the work, can cost more to mine than you can make. Others may not offer as big of an award as others, but because they are low cost to work with, you can still make a good amount of money.

Let's see some of the top currencies that you can work with to earn a profit with mining.



Steem

Steem is known as a digital currency that is based on the blockchain. It is based on the word esteem, but the name is not all that unique since there are so many digital currencies out there for you to use. The idea of Steem is that it is a reward based social media currency system. At this point, it is considered one of the most successful out of the decentralized social networks. Right now, it is used to reward people for the content that they provide. Viewers can use their coins to send over a small reward to someone when they like their videos, content, and other things. This currency has a huge amount of potential for the future, which means that if you start mining now, the coins could easily grow in value over time and your reward will be higher. Mining in this currency is simple, you basically just need to vote for a post to

make it happen. This requires very little upkeep cost to mine, so even though you are not earning a ton, you aren't spending a lot either.



Ethereum

Ethereum is becoming a big name in the cryptocurrency market and it is considered one of the biggest and most fierce competitor to Bitcoin right now. There are a few different types of Ethereum to work with so this one is not considered as dangerous to mine as some of the others. Here we are talking about ETH, not ETC. ETH is considered the original version and it has had a few problems due to a hacking attack.

This hacking attack was dealt with and all the money was recovered thanks to the 28-day hold that was imposed on big withdrawals in the network. This means that there were a lot of customers who were displeased with this network and the price has remained low right now.

Despite some of the issues that have shown up, Ethereum is still a force to be reckoned with. There are a lot of people who like that this system works with the blockchain technology and that it is easy to use. It is also really cost effective to mine in this network, making it easier for you to get started without spending all your money.



Monero

Monero was developed in 2014 and is an open-sourced virtual currency. The

main emphasis of this currency is decentralization and privacy. This means that when you work on this network, you will be able to do transactions securely, maintain your privacy, and things can't be traced. This one works like working in Bitcoin and some of the other digital currencies, but since it is less money to get started with, and it is much newer, you can mine without all the heavy costs that are found in Bitcoin. It is also faster, less likely to run into issues, and will better keep your privacy compared to Bitcoin so it is likely that this one is going to explode in value in the nearest future.

Dash

DASH is a cryptocurrency that is one of the big players on the market right now. This is a digital cash management platform that you can use to transfer your money anywhere in the world. This means that you can make private payments, either to a company or to another individual, no matter where they are located throughout the world. In addition, the transaction fees associated with DASH are much lower than you can get with the Bitcoin network. This is still a relatively new currency to work with so the costs of getting into the market are low.

There is a lot of potentials for this one to grow in the nearest future thanks to the lower transaction fees that you will deal with and the ease of sending payments all throughout the world. Getting into this cryptocurrency now could help you to make a lot of money in the market when the value starts to go up.



Bitcoin

Another option that you can choose to go with is Bitcoin. Bitcoin is one of

the best-known currencies on the market, which means that the value of it is through the roof right now. And each time that you can successfully come up with a code for this currency, you will be able to earn up to 25 Bitcoin.

There are a few issues with mining this currency though. It is so popular that there is a lot of competition to come up with the codes.

It is going to take a lot of power and some mathematical equations to see the results that you are looking for. You could spend a lot of time working on these codes and still not make anything. Most of the people who make money with mining in Bitcoin will do so when they join in with a mining pool and earn the money in that manner.

There are more than a thousand different digital currencies out in the market right now. Some of these are starting to make a big name for themselves while others are only going to be around for a short time before they disappear forever. Finding the right currency, one that can give you a good profit while keeping your costs low and one that will stick around for some time, can be a challenge. Consider working with some of the options above to get the results you are looking for.

Chapter 5: Common Problems a Miner Can Face

Getting started in the mining process can be fun. There are a lot of different currencies that you can work with and the amounts you make often depend on the level of work that you would like to put in. For those who pick out a good currency, especially one that ends up taking off soon, there is a good amount of money to be made from mining.

With that said, there are some issues that can come up when you get started

as a miner. These are issues that you need to address right from the beginning if you would like a chance to make money with mining. This chapter is going to take some time to look at many of the common problems a miner can face and some of the things that you can do to overcome these big issues.

Spending too much

When it comes to mining cryptocurrencies, you need to make sure that you are not spending too much money on the work that you are doing. While getting a new computer and some of the other hardware can be critical to you getting things done, you also need to look for some good deals. The lower you can keep your overall costs when you start, the easier it will be to make a profit.

You also need to consider which currency you are planning to mine before you make purchases. With a choice like Bitcoin, you will need to spend some extra money to get the best computer, processor, and other hardware to stand a chance in the market. But, with some of the smaller cryptocurrencies, you may be fine with your regular computer and some mining software. There is no need to spend more money if the currency can be mined without it.

Picking the wrong currency

You must make sure that you are picking out the right cryptocurrency to mine. There are a lot of choices out there when it comes to available cryptocurrencies, but not all of them will provide you with a reward that is worth your time. The first thing that you need to look for is a currency that has some value, one that is going to be around for some time. You do not want to put in all the work to mine a currency to find out that the value never goes up. Or even worse, to find out that the currency fails, and your coins are no longer worth anything.

Another thing that you need to consider is the cost versus reward ratio. You may find a currency that has some value and will provide a decent reward,

but if that reward does not cover the costs that you are taking on to complete the mining process, then it is not worth your time.

You do not want to spend all the time and money on mining and then find out that the bills at the end of the month are worth more than what you made.

Before you get into a currency, take some time to crunch the numbers. You can look at the average coins that are mined each month and then figure out what other miners are spending on electricity. Add in what you need to spend on the equipment that you need to purchase and see how long it will take to pay everything off. This will give you a good idea of whether this process is worth it for the chosen currency.

Not setting realistic expectations

When you go into the mining market, it is important to have some realistic expectations. You are not going to go into this and become rich overnight. You will need to purchase some equipment to help you get started and it can take a while before you make a decent amount of money. You will either be working with popular currencies, like Bitcoin, that will take a long time before you get a successful code, or you will work with some smaller currencies that don't offer as big of a reward for the work that you do.

Setting realistic expectations can help you to be more successful with the mining that you are doing.

This will make it easier for you to know how much you need to invest in the beginning and how much you are likely to earn from your work.

After looking at the numbers, you may either decide that this is not worth your time, or that you are ready to start. But you need to have these expectations in place from the beginning.

Trying to do it all on your own

It is tempting to try and do all the work on your own. You want to take on the work on your own and then take the whole profit. But mining can be really challenging and sometimes you need a little help to make some profit at all.

With some of the smaller cryptocurrencies, you can do the work on your own and be just fine, but with some of the bigger ones, like Bitcoin, you will end up earning nothing, while spending a lot of money, because of all the competition and how hard the equations are.

The best thing that you can do is join in with a mining pool, or at least find someone else who is willing to work with you. This will not provide you with the whole reward. But you will earn a steady profit based on how much of the code you complete. And a steady amount of income is often preferable to not making anything at all.



Too much competition

Depending on which digital currency you decide to go with, there may be a lot of competition that you have to face. And the more competition that you deal with, the harder it is to make money in this market. When there is a lot of competition, you can work on a code and then find it is not accepted simply because someone else got it done before you. No one wants to spend so much time, energy, and costs on mining and working on a code just to have it not be accepted because someone else beat them to it.

This is one of the reasons that Bitcoin is so hard to mine right now. It is valuable to work in Bitcoin. You can work on a code and earn 25 coins for successfully completing it. With the price of Bitcoin being above \$11,000 right now, this can be profitable. But when there are a ton of other people in the market doing the same thing as you, it could take months before you even stand a chance.

The best thing to do is to pick out a currency that does not have as much competition. You may not be able to earn as much profit from this, but you will be more likely to earn a steady income if you can do this. You can also

consider working with a mining pool so that you can earn at least part of the profit when a code is successfully completed. This may not be as much money all at once, but it provides a steadier income than trying to do it all on your own.

Equipment stops working

So that to be successful in mining, you need to have good computer equipment that can keep up with the work. If some of your hardware stops working, you are not going to be able to make money with mining. It is important that you pick out equipment that is going to last and can keep up with the work.

If you don't know how to fix computers and the hardware that comes with them on your own, it is time to make friends with a computer repair company. You will want to get things fixed as quickly as possible to ensure that you can get back into the game and you aren't losing too much money. Make sure that you add some of these costs to the costs of mining as well so that you don't end up with any surprises later.

Running into hackers

Another issue that you may face is having to deal with hackers. With the rise in popularity of these cryptocurrencies, there are a lot of hackers who are interested in getting onto your wallet and stealing all your coins and personal information. If you are not careful with the wallet that you pick out and hiding your personal information, then it is easy for a hacker to steal your information. And since there isn't a central authority that is controlling these currencies (one of the many benefits to some people), you are out of luck if your coins are taken.

The good news is there are a few different things that you can do to keep your coins and your personal information safe. First, let's keep those coins safe. Picking out a safe and secure wallet is the best way to make sure that a

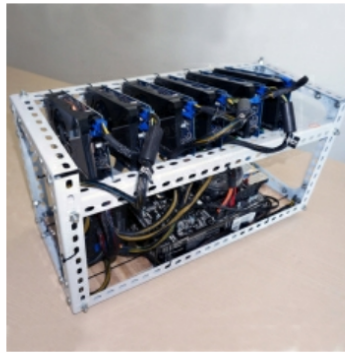
hacker is not able to take your coins. There are three main types of wallets that you can choose from including an online wallet, a hardware wallet, and cold storage.

To get started with mining, you will need an online wallet. This makes it easy for the coins to be sent to you when your code is completed successfully. If you plan on using the coins or exchanging them out right away, then the online wallet is just fine to hold onto the coins in this wallet. However, since these wallets are online, they are not always the most secure option for you to use. A hardware wallet can provide you with a little more protection. You are basically downloading the wallet onto your computer or onto a hard drive and keeping the coins there. You will have to take a few extra steps to use the coins but if you plan to hold onto the coins for a bit to invest them, it is a much safer option compared to working with an online wallet. Make sure that your antivirus is up to date on your computer before doing this option though. If you are not careful, someone could take control of your computer and still get the coins.

For those who are looking to invest their coins and want to keep them in a wallet until the value of the coins goes up, then it may be a good idea to go with a cold storage wallet.

This allows you to print off the private key to the currency that you are using and store it somewhere completely off the computer. This makes it almost impossible for a hacker to get ahold of your currency at all.

In addition, you need to make sure that you keep your information safe and private. The best way to do this is to choose a unique address when you sign up for a new currency. You can usually choose the address that you want to use so don't put your personal information, such as your first and last name, inside the address. If you end up doing well with mining, you may want to consider changing the address on occasion to help make it harder to trace the transactions you are doing.



Currency becoming worthless

If you are not careful with the digital currency that you choose to work with, you could find that your coins are worthless at some point. There are more than 1000 digital currencies on the market right now, but not all of them are going to be successful. While there is room for more than just Bitcoin in the market, the cryptocurrency market is just not successful enough to handle the number of currencies that are coming up. Some of the more solid ones, the ones that are designed to fit a need in the market, will stick around, but there are plenty of currencies that are created simply because the market is so popular right now.

No one wants to invest all their money and then find out that their currency is worthless, and they haven't earned anything for all the hard work that they put in. Therefore, you need to be careful with the currencies that you need to pick. It doesn't mean that you only need to pick out currencies that are worth a lot of money now. Getting in on the ground floor of a currency can help you to earn more money in the long run. But if you choose a currency that disappears within a few months, you did all that work and have nothing to show for it.

As a miner, there are a lot of issues that you need to worry about. You may find that a currency is too much work or money for how much you are being paid.

You may have an issue with too much competition in the market, or there may be issues with your equipment not working the way that it should. Learn-

ing how to make the currency work for your needs can make all the difference in how much money you can make.

Chapter 6: The Cost of Getting Started

Video cards and other parts

Most important part of making a mining rig is a strong video card also called a graphics card. New technology is adapting to cryptocurrency mining, so now we have a range of gear that we can choose from for our mining rig. A big investment isn't always a smart one, but in the most situations, stronger is better.

The most popular graphics card now is RADEON PowerColor RX580 8GB. When it comes to pricing it is around \$490 US. The average hash rate that PowerColor 580 can manage for Ethereum is 21 Mh/s. Many miners choose this GPU because it is profitable, fast, and has low power usage. The video memory is running at 2000 MHz, RX 580 counterparts do come with higher clocks and improved cooling solution.

Cryptocurrency is flooding the world at a fast rate and tech companies are using the advantages of creating gear that will have the best use in mining. The Inno3D GeForce GTX 1060 X2 3GB NVIDIA is one of top 5 mining GPUs that you can use for a certain budget. You always need to know what coin you want to mine because the difference in efficiency is a thing. This was not really designed to do Ethereum mining but this one is made for Z cache mining. If you want to compare it with Ethereum it does about 20 Mh/s per GPU. Price is around \$300 US.

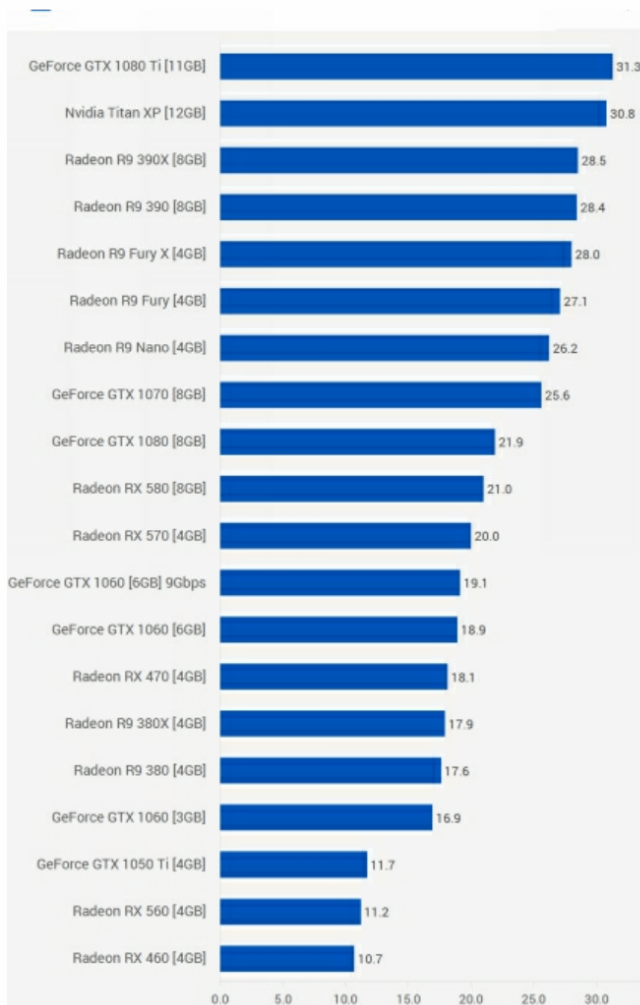
For those enthusiastic miners out there is familiar that AMD RX Vega 64 is out. For best progress, you will need the best GPU like Sapphire AMD Vega 64. Some say it doesn't work as good as it should be working, but 40 Mh/s estimated Ethereum mining is awesome. Sapphire is the brand of choice when it comes to the best custom AMD graphics cards made. Sapphire's coolers have historically been able to sort out GPUs with TDPs more than 250W.

New GPUs feature a high bandwidth cache and memory controllers removing the capacity limitations of traditional GPU memory. Vega GPU utilizes HBM2, the latest in graphics memory technology, to provide incredible levels

of power efficiency and memory performance.

When you look at the hashes per watt the Vega 56 card is doing the best, but the Vega 64 liquid cooled card has the highest overall hash rate. For this quality, you need to have \$900 US.

Depending on your investment strategies, a price for a mining rig is determined by your GPU. Focus on picking the right one will provide you a high success rate in mining.



If you have personal benefits for some graphics cards, like price or free used parts, here is a comparison table of GPUs. The rate is determined on Ethereum because it is very stable, and you can exchange it for every cryptocurrency you like if you had in mind to save other. You can see that new

technology is surpassing old ones very fast. In term of AMD RX Vega 64, it out scales all GPUs in the table with a hash rate over 40 Mh/s.

Besides video cards, every mining rig is composed of a power supply, motherboard, CPU, SSD storage, 8GB DDR4 RAM would be a great choice, PCI-E risers, 8 GPU miner case for starters.

EVGA SuperNOVA 1600 G2 80+ Gold with a 90% efficiency is a perfect power supply for a mining rig. It has a great protection including SCP (short circuit protection), OPP (over power protection), OVP (over voltage protection). EVGA 1600 has 15 SATA connections and 6 Molex connections. For \$350 it will become a part of a good mining rig.

Asus Prime Z270-A is a motherboard can be a good choice for this composition. It has FanXpert 4 automatically tailors overclocking profiles to your unique build for maximum OC performance and dynamic system cooling. It can support 8 GPUs. With x4 PCI Express 3.0/2.0 bandwidth, M.2 supports up to 32Gb/s data-transfer speeds. Cost is around \$150.

Intel Pentium G4400 with 3.3 GHz processor speed is a CPU for long term mining. Wattage use is around 47 watts and with a price of \$60, it will do a great job.

Kingston A400 120GB is more reliable and durable than a hard drive, A400 is built with Flash memory. There are no moving parts, making it less likely to fail than a mechanical hard drive. Cost of Kingston A400 120GB is around \$60.

Each Vengeance LPX module is built with a pure aluminum heat spreader for faster heat dissipation and cooler operation, and the eight-layer PCB helps manage heat and provides superior overclocking headroom. Two of Corsair Vengeance LPX 8GB 2400MHz would do the job with a price of \$90 combined.

For connecting video cards to motherboard we use PCI-E risers. One GPU will be straight connected to the motherboard so if you want 8GPUs you will need 7 more risers. It costs around \$50.

A case is important when you are going with a larger rig. Making your own can be risky if you're not a professional. There are many cases made for 8 GPUs, and one of them is Veddha Professional 8 GPU miner case that costs \$190. A smart move would be to get one power button for the motherboard, its cheap, around \$5, but it is great for replacing the power switch cable as a momentary reset switch cable and restart switch cable.

Full rig build for maximum efficiency on a normal budget would cost 4875\$. From there on you can buy the same set over and over.

When you make a good profit mining you can focus on it like a full-time job. Committing to mining fully before making a larger profit is not a smart idea because it is a relatively new thing with no background. It drastically changes through days and predicting what will happen next would be just a simple guess.

ASIC miner

An application-specific integrated circuit (abbreviated as ASIC) is an integrated circuit (IC) customized for a use, rather than intended for general-purpose use. In Bitcoin mining hardware, ASICs were the next step of development after CPUs, GPUs, and FPGAs.

Note that Bitcoin ASIC chips generally can only be used for Bitcoin mining. While there are rare exceptions - for example, chips that mine both Bitcoin and Litecoin - this is often because the chip package effectively has two ASICs: one for Bitcoin and one for Litecoin.

CPUs and GPUs and pretty much all of consumer computer systems are great multitaskers, ASIC miners are phenomenally good at doing only one or two very specific things. In the case of crypto mining ASICs, they are as efficient as it gets when it comes to gathering coin.

Why many people decide not to get an ASIC of their own is pricing. Price can get up to \$5,000 and a part of that they are very heavy.

ASIC miners, in general, seem to have a shelf life of about three months. That doesn't mean that after three months they stop working, they just be-

come far less profitable as the first batch hits the market.

ASIC miners generally don't have connectors, the only wires required for the system to do its thing are a power cable and an Internet connection. The rest is all configured straight from the browser. One thing that annoys many people when they plug in the ASIC is a very loud noise it makes, it is equal to a strong fan.

When ASICs first came out people were reportedly earning about \$50 to \$80 per day. Of course, profits start dropping dramatically as soon as the first batch of ASIC miners hit a new algorithm and drive up the difficulty. In the start of mining, profits are astronomically high, high enough to pay itself off in less than a single month if you got it for a lower price. The thing is that almost instantly it drops its profitability. From expecting ROI (return on investment) of 30 days, it went up to 200 plus days.



It will drop its profitability slow and steady, and eventually, it won't be profitable anymore. If you buy six RX Vega 56 cards for mining and then become unprofitable mining 1 coin, you can switch to a new one, as for most ASICs you are stuck using one or two algorithms.

If you are one of the very lucky few who can get their hands on the first batch or two of new ASIC miners, there is a quite a bit of relatively quick profit to be made and after that, you are back in the black and you can still sell the machine for a good bit of the value. Of course, if the coin you mined has not crashed you can sell the machine.

If you decide to try to get a quick profit with ASIC miners and stick to 1 coin, here is a comparison of some of ASIC miners. The price varies from \$300 to \$2400 USD.

At \$2400 price the S9 is far from cheap. However, the lower your electricity costs, the better your odds of the miner paying for itself within a reasonable timeframe.

The S9 has more hashing power than any previous device crammed into its silicon, a massive 14 TH/s (TeraHash per second).

The total power consumption of the device works out to around 1350 watts, although this figure is subject to about 7% of the variance. The S9 consumes about 300W more than the S7.

Apart from the power supply, the S9 is a self-contained unit. It requires no connection to another computer to interface with other Bitcoin nodes. Its onboard web management portal allows for a simplified setup and maintenance process.

It is likely to remain profitable for far longer than previous generations of ASIC miner, although ROI cannot be guaranteed given the inherent unpredictability of Bitcoin mining.

GPU mining still seems to be the most stable reliable route for crypto mining. ASIC miners make a lot of noise, they are very hot and heavy, so it is too much work for something that should be changed from time to time. The return on investment is not the greatest for the graphics card, depending on the card in question, but their versatility resale ability more than makes up for it.

The reward for mining coins

The reward that you can earn for mining will depend on the currency you are working with.

Those that offer a bigger reward will often require a lot more processing power and take more time, so your costs will be up. The amount also depends on the current value of the coin. Some of the rewards for the most popular cryptocurrencies include:

- Bitcoin: You can earn 25 Bitcoin for each successful chain.
- Litecoin: The reward for Litecoin is 25 right now but is estimated to go down to 12.5 by August of 2019.

- Ethereum offers 5 Ether for block mined.
- Bitcoin Cash: This currency is not having much luck with offering a reward right now. It is still working through the initial release of coins.

Conclusion

Thank you for making it through to the end of this book, let's hope it was informative and able to provide you with all the tools you need to achieve your goals whatever they may be.

The next step is to decide if you would like to get started with mining in cryptocurrencies. There are many reasons to join in this endeavor, but it is not the right choice for everyone. When you are ready to get started with mining in cryptocurrencies and you want to make sure you have everything lined up properly, then make sure to read through this guidebook. Mining can be a challenge, but when you have everything in place, you will be able to get the work done in no time with great results.

Finally, if you found this book useful in any way, a review on Amazon is always appreciated!