Long-Term Investment Research Framework
Exercise Progress: 1 of 49 Steps Completed
Cryptocurrency Chosen: Monero

Year that Monero was founded: 2014
First date Monero was traded: 4/18/2014
Ticker Symbol for Monero is: XMR
Block Time (Time to Create New Monero) is: About 2 minutes

STEPS 3-5: Monero Price,Restrictions,Purpose,Your Opinion on Long Term Strategy:

☐ Check this box when you understand Steps 3-5

Market Capitalization: $ 3.31B

Monero Price: $ 206.74

52 Week Low: $ 25.48
52 Week High: $ 473.21
Country of Origin: N/A

STEP 3: Any Restrictions for Monero in: Canada (Click me)?

(Click me to answer)

STEP 4: **What is the Brief Purpose of Monero (What Problem is it Solving)?**

Monero was created to be a much more secure cryptocurrency. It uses a sophisticated signature with every transaction, making it impossible for an outsider to trace.

STEP 5: **What is Your Brief Opinion On the Long-Term Strategy of Monero ?**

Since Monero's value proposition is having a fully private and untraceable blockchain, the cryptocurrency should prosper in the long run as long as long as it can solve its scalability issues (please see Step 21 below for more details).

STEPS 6-17: Monero Sources to Read/Review/Research and Stay on Top of:

Please click on the green cells below to mark each as Done or N/A.

Click the Green Shaded Cells Below to Select Done, Not Done or Not Applicable

STEP	Status	Description
STEP 6:	Not Done	Did you sign up for Monero Google Alerts at alerts.google.com? Click me to go to alerts.google.com.
STEP 7:	Not Done	Did you read the whitepaper for Monero? Click me to access the Monero whitepaper.
STEP 8:	Not Done	Did you sign up for Meetup.com meetings in Canada for Monero? Click me to access local meetups in Canada for Monero (if available).
STEP 9:	Not Done	Using Twitter, have you followed official Monero Twitter feed? Click me to access Twitter to follow the official Monero Twitter feed.
STEP 10:	Not Done	Have you tried the product (meaning have you bought or sold fractions of or an entire Monero)? If not, please watch the lesson in Part 2 of the course on how to buy Monero.
STEP 11:	Not Done	(Optional) Have you used Github.com to research Monero? Click me to access Github.com and read about/research Monero
STEP 12:	Not Done	(Optional) Have you used Reddit.com to research Monero? Click me to access Reddit.com and read about/research Monero
STEP 13:	Not Done	(Optional) Have you used YouTube to research Monero? Click me to access YouTube.com and read about/research Monero
STEP 14:	Not Done	Have you reviewed the contents and resources on the Monero website? Click me to access the official website for Monero
STEP 15:	Not Done	(Optional) Have you reviewed the Wiki website contents and resources for Monero? Click me to access a helpful Wiki resource for Monero
STEP 16:	Not Done	Have you reviewed the non-editorial articles for Monero on Coindesk.com? Click me to access Coindesk.com articles for Monero
STEP 17:	Not Done	Have you analyzed how Google search trends have changed for Monero? Click me to access Google search trends for Monero . Optional: enter your thoughts in the space below on the change in search interest over the past 12 months.

STEPS 18-21: Monero Qualitative Investment Research Comments (Background + Pros & Cons):

☐ Check this box when you understand Steps 18-21.

STEP 18: **What is Monero? This is similar to Step 4, with much more detail on the background of Monero.**

The Monero cryptocurrency was launched in 2014 as the "secure" cryptocurrency. Its sophisticated privacy and security features allow users to transact without allowing anyone to access your balances or track your activity. For more details, please refer to Step 19 below.

STEP 19: **Why does Monero exist?**

Monero exists to improve the security, privacy, traceability, and interchangeability of digital currency transactions. Transactions with Monero are affirmed through distributed consensus and then permanently recorded on the blockchain. There is no need to ensure that third-parties keep your Monero safe since the underlying technology uses ring signatures, ring confidential transactions, and stealth addresses to hide the origins, amounts, and destinations of all transactions. Monero has the benefits of a decentralized cryptocurrency, without the typical privacy compromises. For that same reason, transactions on the Monero blockchain are untraceable to a particular user or real-world identity. Because Monero is private by default, it is also fungible and cannot be ostracized by vendors or exchanges due to associations in previous transactions.

Monero's basic difference to Bitcoin is its heavy focus on privacy and fungibility. Unlike Bitcoin, Monero is the only cryptocurrency that provides true, decentralized privacy.

STEP 20: **What are the pros (positive attributes of) Monero ?**

Monero's technology utilizes three different technologies to conceal sender, receiver, and the amount transferred for full privacy. To directly quote the official Monero website, "In Monero, there is no way to accidentally send a transparent transaction." All cryptos considered, Monero is seemingly the number one blockchain option for high level security currently available in the ecosystem. Adding to the benefits of Monero, this cryptocurrency has no limit when it comes to block size, in other words, the block size of Monero can be increased in proportion to the amount of market demand. While there are similar projects such as Z Cash & PIVX that are also on the market, Monero only takes about 2 minutes to verify a transaction and is the most advanced in the privacy blockchain technologies. The fact that there are multiple privacy-focused cryptocurrencies accepted by people on the market, just goes to show that the security and privacy problem is a real issue that the market is interested in solving.

STEP 21: **What are the cons (negative attributes of) Monero ?**

One of the biggest cons of Monero is that it does not have a standard voting system for changes to the project. Instead, suggestions for changes and updates to the Monero network can be posted to the Monero forum https://forum.getmonero.org/, but in the end, it is the Monero developers who decide which updates and changes to implement and adopt. Additionally, the official Monero forum is not very active. The Monero forum on Reddit is more active than the aforementioned official website forum, implying a lack of structural project management. One of the pros of Monero is that the block size has no limit, however, there is a restriction in the block size growth rate, indicating that there will be some scalability issues with Monero.

STEPS 22-24: Monero Management Team, Investors, Developers, Partners, Customers:

☐ Check this box when finished with Steps 22-24.

STEP 22: **What is the management team like for Monero? Include information like your thoughts on the quality of the CEO, the quality of the developers that work there, the quality of board, the quality of investors etc (check out crunchbase.com and comment on VC investors if applicable).**

There are 7 developers on Monero's core team who are led by Riccardo Spagni with hundreds more who have contributed over the life of the project. The true identity of the founder of Monero is unknown but their pseudonym "thankful_for_today" had a falling out with the community after the founder proposed controversial changes that the community disagreed with. Since then, the Monero Core team forked the project along with the community and now provide oversight on the projects developments. Monero doesn't have a board but they do have MetaStable as an investor which is a crypto hedge fund backed by Silicon Valley's largest venture capital firms: Andreessen Horowitz, Sequoia Capital, Union Square Ventures, Founders Fund and Bessemer Venture Partners. MetaStable apparently holds roughly 1% of all outstanding Monero coins.

Click me to go to the Crunchbase page for Monero in order to view the investor profiles, the management team profiles and the background of the board (if available). The free content on Crunchbase is all we need...no need to pay for a subscription.

STEP 23: **What is the developer community like for Monero? Include information like do you think they seem committed to improving the cryptocurrency or are they opensource or not, etc.?**

Monero is open-source, accessible to all, and has a very strong, constantly growing developer community. It's so strong that it parted ways with the founder of Monero while maintaining a steady course toward achieving Monero's privacy goals.

STEP 24: **Does Monero have any noteable reference customers or partners (i.e., large companies or government agencies that use or have positive things to say about Monero)?**

Monero's notable partnerships include Microsoft, The Invisible Internet Project (I2P) and Project Coral Reef.

STEPS 25-26: Monero Security & Differentiation Versus the Competition: ☐ Check this box when finished with Steps 25-26.

STEP 25: **Please comment on the strength of the security of Monero when compared to other cryptocurrencies.**

Due to Monero's private and untraceable nature (anonymity factor), it is one of the safest and most secure cryptocurrencies in the market. Their anonymity feature has been updated and improved to ensure that users making transactions with Monero cannot be identified.

STEP 26: **How is Monero different from other cryptocurrencies (in addition to differences in security protocols if applicable)?**

When a Monero transaction happens, the identity of both sender and receiver remains completely private. Additionally, Monero transactions cannot be linked to each other. All Monero transactions (without exception) are private and untraceable, just like physical cash.

STEPS 27-28: Wallets and Echanges that Support Monero: ☐ Check this box when finished with Steps 27-28.

STEP 27: **Of the 6 exchanges discussed in this course, can you transact in Monero on all 6 of these exchanges: GDAX, POLONIEX, KRAKEN, BITTREX, GEMINI, and BINANCE? If not, which of the 6 aforementioned exchanges do not currently accept Monero?**

Of the 6 exchanges discussed in the course, Gemini and GDAX are the only exchanges that do not support Monero.

STEP 28: **Of the 8 wallets discussed in this course, can you use Monero with all 8 of these wallets: QR CODE PAPER BASED WALLET, TREZOR, LEDGER NANO S, DIGITALBITBOX, KEEPKEY, COINBASE, ELECTRUM AND BLOCKCHAIN? If not, which of the 8 aforementioned wallets do not currently accept Monero?**

Of the 8 wallets discussed in the course, none of them currently support Monero, however, Ledger Nano S is working on integrating Monero into their hardware wallets. Monero can be stored in the mymonero.com wallet.

STEPS 29-30: Current and Maximum Supply # and Date of Maximum Supply of Monero: ☐ Check this box when finished with Steps 29-30.

STEP 29: **What is the current supply of shares of Monero available today?**
~ 16 million

STEP 30: **What will be the maximum supply of shares of Monero available AND what approximate year will the maximum supply be at (ie 2040)?**
18.4 million XMR + 0.3 XMR/minute with 2022 being the approximate year it'll hit the max supply cap. More details: basically, Monero has one initial supply emission which will issue around 18.4 million coins to be mined by the end of May 2022. From that point forward, there will be a constant "tail emission" which means block rewards will be fixed to 0.6 XMR per 2-minutes block (modified from 0.3 XMR per 1-minute block). The tail emission ensures that block rewards never drop to zero so that miners remain incentivized.

STEPS 31-33: Country, Accounting and Bug Risks of Investing in Monero: ☐ Check this box when finished with Steps 31-33.

STEP 31: **If applicable, who is the auditor of Monero and are they reputable/well known in their country of origin or country of incorporation?**
N/A

STEP 32: **Are there any notable country or regulatory risks when it comes to Monero that might hurt the ability of Monero to be successful in the long-run when compared to other cryptocurrencies?**

Unlike other cryptocurrencies, Monero is less susceptible to the ramifications of regulations and attempts to enforce tax codes. Because of the ring signatures, it is almost impossible to prove who owns a Monero token. Basically, this means that token holders may seek to use Monero as a way to protect their profits from taxation or to prevent governments from seizing their funds should there be strong regulation on cryptocurrencies. A key price driver of Monero is regulation, so whenever it appears that the US or EU is about to tighten crypto regulation, that's when many

STEP 33: **Are there any code bugs for Monero that are a concern for investors?**
Because Monero is minable with CPU (in contrast to GPU), it is at risk for malicious actors to covertly disperse miners implanted in malware, using the victim's hardware and electricity for the malware developer's financial gain.

STEPS 34-35: What would make you MUCH MORE or MUCH LESS positive on Monero?   ☐ Check this box when finished with Steps 34-35

STEP 34: **What would make you MUCH MORE positive on Monero (meaning what news development, contract, etc would make you much more positive)?**

I would be much more positive on Monero if it were approved on more exchanges and had more wallet options.

STEP 35: **What would make you MUCH LESS positive on Monero (meaning what news development, contract, etc would make you much less positive)?**

I would be much less positive on Monero if a large scale hack were carried out by a malware developer (sounds like an obvious statement, but it is worth mentioning as Monero's key value proposition is security/privacy)….although a flaw in its security model would be a much bigger concern.

STEPS 36-39: Mining Incentives, Reddit & Twitter Followers forMonero: ☐ Check this box when finished with Steps 36-39

STEP 36: Is there an economic incentive for people to impove Monero (ie through mining etc? Please explain)

People that run the mining software that processes and verifies Monero transactions will earn Monero.

STEP 37: How many Reddit readers does Monero have?

Monero has 127,847 Reddit readers, compared to an average of 192,950 for these ten cryptocurrencies: BTC, ETH, XRP, LTC, XMR, ZEC, DASH, NEO, ADA, XLM.

STEP 38: How many Twitter readers does Monero have?

Monero has 289,000 Twitter readers/subscribers, compared to an average of 363,890 for these ten cryptocurrencies: BTC, ETH, XRP, LTC, XMR, ZEC, DASH, NEO, ADA, XLM.

STEP 39: [Optional] Write in the space below the name of another social media company like Twitter that is worth tracking in your country when doing research on Monero and comment on the metrics relative to other cryptocurrencies similar to what you have done in Step 38.

STEPS 40-43*: Quantifying an Estimate on the Long-Term Target Price for Monero: ☐ Check this box when finished with Steps 40-43*

In this step, we will use several assumptions for coming up with an approximate long term target price on Monero. Please answer questions 40-43 in order to arrive at a target price based on your assumptions. This is meant as a guideline for one way we can think about quantifying a target price. Please read the 6 facts below before answering the questions; thanks:

* Please note that the source of the data for the size of markets used in the facts below are at this website (click me to go there): money.visualcapitalist.com/worlds-money-markets-one-visualization-2017/

Fact #1: Stock Market Combined Value: The value of all stocks added up (meaning the combined global market cap of stocks) is in US $: $73,000,000,000,000

Please note that $73,000,000,000,000 US dollars in Canadian dollars is 93,934,940,000,000 using an exchange rate of 1.28678 per $1 US dollar (you can change this rate by clicking on me or by clicking on the settings button).

Fact #2: The World's Largest Stock Value: The value of the largest company in the world on the stock market (which is Apple) is: $865,000,000,000

Please note that $865,000,000,000 US dollars in Canadian dollars is 1,113,064,700,000 using an exchange rate of 1.28678 per $1 US dollar (you can change this rate by clicking on me or by clicking on the settings button).

Fact #3: % of the Stock Market Value in the Largest Stock: The % value of the largest stock as a % of the world's market cap is about: 1%

Fact #4: The Value of the World's Money Supply: The total of all of the money supply added up in the world is: $90,000,000,000,000

Please note that $90,000,000,000,000 US dollars in Canadian dollars is 115,810,200,000,000 using an exchange rate of 1.28678 per $1 US dollar (you can change this rate by clicking on me or by clicking on the settings button).

Fact #5: According to www.CoinMarketCap.com, the market cap of all cryptocurrencies is: $422,000,000,000

Please note that $422,000,000,000 US dollars in Canadian dollars is 543,021,160,000 using an exchange rate of 1.28678 per $1 US dollar (you can change this rate by clicking on me or by clicking on the settings button).

Click me to get this fact by scrolling down to the bottom of this page for the data source: https://coinmarketcap.com/all/views/all/

Fact #6: The percent of the market cap of all cryptocurrencies as a percent of all money supply in the world is: 0.47%

Please note, the target price (below this box) is just a sample, please watch the video associated with this called *(A) Using My Investment Framework to Analyze Monero* for more details.

You can update your version of the target price in the upcoming lecture, called: *(A) An Exercise on Creating YOUR Version of the Monero Investment Framework.* For more details, please watch *(A) An Exercise on Creating YOUR Version of the Monero Investment Framework.* Thanks

STEP 41: What percent of the ENTIRE cryptocurrency market do you think Monero will have in cryptocurrencies in 20 years? Use the grey up and down arrows on the right to select your answer in the green box...or just type your answer in the green box:

10 %

Based on your answer of 10%, this implies that your 20 year estimate of the value of the market cap of Monero will be 900,000,000,000 US dollars.

Please note that $900,000,000,000 US dollars in Canadian dollars is 115,810,200,000 using an exchange rate of 1.28678 per $1 US dollar (you can change this rate by clicking on me or by clicking on the settings button).

STEP 42: What do you think the supply of coins for Monero will be in 20 years? Use the grey up and down arrows on the right to select your answer in the orange box...or just type your answer in the orange box. You can use the answers in Steps 29 and 30 if you want to:

20 Million coins

Based on your answer of 20 million coins, this implies that your 20 year estimate of the value of the price of Monero will

Please note, the target price (below this box) is just a sample, please watch the video associated with this called *(A) Using My Investment Framework to Analyze Monero* for more details.

You can update your version of the target price in the upcoming lecture, called: *(A) An Exercise on Creating YOUR Version of the Monero Investment Framework.* For more details, please watch *(A) An Exercise on Creating YOUR Version of the Monero Investment Framework.* Thanks

WHAT ABOUT DISCOUNTING THE FUTURE VALUE? You might now be thinking that if we are forecasting what the target price will be in the future, then we should discount that future price into today's amount as a dollar that we receive in the future is worth less than a dollar that we receive today (if that sounds confusing, please make sure to watch the lecture called "(A+B) Steps 40-43: Estimating on the Long-Term Target Price on the Crypto"....and think of the reverse logic....meaning if we invested $1 in the bank today, it would be worth more in the future because of interest that we would make in our bank account...so we would prefer to get that $ today rather than in the future. The math below will clear this up).

[Optional] STEP 43: If you wanted to discount the future price into today's value using your own discount number of years and your own interest rate, then please plug those 2 parameters into the boxes on the right to get a more conservative discounted price as of today.

Enter Discount # of Years:	Enter Discount Interest Rate:
20	**10%**

Based on all of the assumptions listed above, and using a discount time period of 20 years and using a discount interest rate of 10%, the target price for Monero is $6,689

STEPS 44-49: Technical Analysis for Monero: ☐ Check this box when finished with Steps 44-49

Please watch the lesson mentioned in the yellow box on the left before looking at the technical analysis concepts below. Please note that the aforementioned lesson will explain how to look at charts when you do your technical analysis (please please please focus much more time on your long term fundamental analysis instead of technical analysis).

Monero Price: **206.74**

STEP 44: AVERAGE 3 MONTH VOLUME DATA:

Average 3 Month Daily Volume for Monero:	15.57M
Avg. 3 Month Daily Volume for Monero in US $:	$3,219M US Dollars
3 Month Daily Volume for Monero in Canadian dollars:	4,142M Canadian dollars

Please look at the average 3 month volume of Monero in the data for Step 44. Is this cryptocurrency liquid enough for you to easily buy or sell in 1 trading day? Please enter your comment below.
In most cases, the cryptocurrency volume is high enough for us to be able to get in or out within 1 day if needed. I want to put this concept on your radar screen now so that you can better assess the volume characteristic if you ever transact in less liquid cryptocurrencies as illiquid investments own us in a bad market (rather than vice versa).

STEP 45: 52 WEEK HIGH DATA:

52 Week High:	473.21
$ Change from 52 Week High:	-266.47
% Change from 52 Week High:	-56%

Please look at the price of the 52 week high for Monero in the data for Step 45 and comment on the data below.
Monero is 56.31% below the 52 week high price of 473.21. Most of the time, the price will be below the 52 week high. If the % below the 52 week high is material, then this could indicate that sentiment is negative given a negative news item or negative sentiment on the entire crypto market or another reason.

STEP 46: 52 WEEK LOW DATA:

52 Week Low:	25.48
$ Change from 52 Week Low:	181.26
% Change from 52 Week Low:	711%

Please look at the price of the 52 week low for Monero in the data for Step 46 and comment on the data below.
Monero is 711.38% above the 52 week low price of 25.48. Most of the time, the price will be above the 52 week low If the % above the 52 week low is material, then this could indicate that sentiment is positive given a positive news item or positive sentiment on the entire crypto market or another reason.

STEP 47: 50 DAY MOVING AVERAGE DATA:

50 Day Moving Average:	215.49
$ Change from 50 Day:	-8.75
% Change from 50 Day:	-2462.74%

Please look at the price of the 50 day moving average for Monero in the data for Step 47 and comment on the data below.
Monero is -2462.74% above the 50 day moving average of 215.49, which indicates that sentiment may be positive on Monero. (If the % above the 50 and 200 day moving averages are positive, then, this means that sentiment could be versy positive and vice versa.)

STEP 48: 200 DAY MOVING AVERAGE DATA:

200 Day Moving Average:	244.85
$ Change from 200 Day:	-38.11
% Change from 200 Day:	-642.48%

Please look at the price of the 200 day moving average for Monero in the data for Step 48 and comment on the data below.
Monero is -642.48% above the 200 day moving average of 244.85, which indicates that sentiment may be positive on Monero. (If the % above the 50 and 200 day moving averages are positive, then, this means that sentiment could be versy positive and vice versa.)

STEP 49: RELATIVE STRENGTH INDEX (RSI):

What is the RSI and How Should I Consider Using the RSI Data? If you want, please watch the lesson mentioned in the yellow shaded column on the left before starting before reading the rest of Step 49. The Relative Strength Index (RSI) can indicate if too many people have been buying or selling and a technical mean reversion chart movement could occur (I generally love buying when everyone else is selling and vice versa as long as I love the underlying long term fundamentals on the underlying cryptocurrency).

Potential Buy Indication Using the RSI: An RSI close to 20, indicates that the cryptocurrency may be oversold, which is a great buy signal if you love the long term fundamentals.

Potential Sell Indication Using the RSI: If the RSI is close to 80, then this could indicate that you might want sell and book a little bit of profit and hopefully buy the cryptocurrency back at a lower level (when it is no longer overbought). There is nothing wrong will booking a little bit of profit by trading every now and then....but we are more focused on being long-term investors.

Click any cryptocurrency button below to see its RSI chart. If you don't see RSI at the bottom of the chart after clicking on one of the buttons below, then click on INDICATOR in the top left hand corner after you click on the button and add the RSI. Make sure you are using the most recent dates on the chart. If you get an error message in your browser, go to finance.yahoo.com and create the chart for whatever crypto you are using. Thanks

RSI Chart for Bitcoin	RSI Chart for Ethereum	RSI Chart for Ripple	RSI Chart for Litecoin	RSI Chart for Monero	RSI Chart for Zcash	RSI Chart for DASH	RSI Chart for NEO	RSI Chart for Cardano	RSI Chart for Stellar

If you want, please enter your thoughts on the RSI chart that you looked at in the space below:
Here is an example on how to complete this RSI comment: "oversold now at an RSI near 20 (means a buy indication ONLY IF you are long term positive on the fundamentals of this cryptocurrency based on your research in the many many steps completed above me on this report" ....or.... "overbought now at an RSI near 80 (means I might consider taking a bit of profit if I own this cryptocurrency and buy that small amount back at a lower RSI....or if you want to start a position, then it might not be the right time given how overbought the RSI indicator suggests."   [Please read the contents of the yellow box below thanks.]

I have to stress again, that in general, please be more long term-focused so we can be long-term owners and not merely "tourists" or "renters" of any investment. If we do our thorough research on any investment, then we are more likely to be longer-term focused (if we like the fundamentals based on our research process). This will ensure that we don't sell at the worst time and vice versa like most investors do (which often creates opportunities for the better informed investors to profit in the long run). Of course, and as a disclosure, positive returns are not guaranteed by this course...I just want to help you understand how to research investments. Thanks