Consulting and Change Management Assignment 1

Name: Brendan Wallace-Nash

Student Number: n9993304

Unit Code: MGN565

Due Date: 03/09/2021

Word Count: 2185

The landscapes for organisations are forever changing. Each year there is a new external force that can either bring a business into a new era or make their practice redundant, this sentiment has never been more relevant than today where an unforeseen pandemic has crippled or accelerated organisations growth. Scenario planning was first implemented by the U.S. military to guide research and development for the next 20 years (Luther, 2020). The act of scenario planning allows for an organisation to try to implement strategies that could either take advantage of or prepare for scenarios that could emerge decades into the future. The foundation of a well-developed scenario planning strategy is to conduct a thorough analysis of emerging external and internal factors related to the organisation that can develop over the next decades. Organisations can develop a list of broad scenarios and nimble response plans to cope with what is believed to be the most likely scenarios, either through the implementation of organizational development or in response to identified scenario triggers (Luther, 2020). In this report, I will be analysing the foreseeable futures of the Commonwealth Bank of Australia (Commonwealth Bank), Australia largest banking institute and what changes their organisational environment could face in the next 20-30 years.

**Free Trading Platforms and Algorithmic Trading**

CommSec, a subsidiary of the Commonwealth Bank, has seen strong growth with 230,000 new accounts from September 2020 to February 2021 (Derwin, 2021). Growth in retail stock investors has been seen across the board with digital platforms eToro and Robinhood recording 30%-40% growth in accounts over the last year. While in Australia the use of free trading platforms has yet to take over the established providers like the CommSec, trading platforms like Robinhood’s model presents cause for concern as Robinhood's model lends itself to the growth of algorithmic trading (Reinkensmeyer, 2021).

     Algorithmic trading uses artificial intelligence (AI) and Machine Learning (ML) techniques to predict the values of stocks and predict when to buy and sell stocks. Recent research has shown in particular market cycles algorithmic trading software has outperformed index funds like the S&P 500 (Kinderlin, 2021). While typically automation of this manner would be a positive for CommSec, as we have seen companies like Goldman Sachs replace 600 traders with only 200 software engineers, Commonwealth Bank could risk losing out to its global competitors if automation becomes the standard in the next 20 to 30 years (Byrnes, 2017).

The widely adopted retail trading platform Robinhood has built its whole model on the value of user trading data. Robinhood sells its user data to bigger firms like J.P. Morgan Chase. While this data is mostly used for identifying consumer trends, it will become more and more important as this consumer data will be used to develop trading algorithms (Qin, 2012). Robinhood could see itself being the biggest trading platform in the world for retail traders in the next 20 years as they are already expanding to Australia and the United Kingdom, allowing them access to the largest amount of user trading data available.

Big data, while often hard to acquire and work with, is touted to be the key to the next generation of algorithmic (Qin, 2012). Currently, the CommSec does not collect user trading data for private use, as per their terms and conditions (CommSec, 2017). While CommSec doesn’t collect user trading data, even a shift to doing so would probably be futile as the scale of data Robinhood would have available will allow them to create algorithmic trading models for a larger range of shares from a more diverse historical user data set. This advantage will likely put Platforms like Robinhood ahead of CommSec in the next 20 to 30 years, as they will offer a free platform with greater technology in AI-assisted trading.

**Hyperinflation’s Effects on Commonwealth Bank**

Hyperinflation is defined by the hyperbolic rise in general prices within an economy, that exceeds that of typical inflation by 50% a month (Kenton, 2021). Hyperinflation can be caused by a multitude of factors but typically it occurs following a recession and is caused by a growing lack of faith in confidence in the economy or monetary system, and excessive money supply (Kenton, 2021).

Currently, Australia’s continued lockdowns are pushing us towards a double peak recession that could eventually see us head into a stage of hyperinflation within the next 2 to 3 decades (Taylor, 2021). While the Reserve Bank of Australia has increased their money printing recently, it is believed that this is a relatively controlled process and Australia already had a good starting position to proceed in this process (Taylor, 2020). While there may be a belief that Australia is positioned to not enter hyperinflation, Google Trends shows that people are concerned about the topic as Australia was one of the regions with the highest interest in hyperinflation, only beaten by Zimbabwe, Bolivia, Venezuela, Peru and Argentina, who are all amid hyperinflation or threat of it (Google Trends, 2021). With Australia is in an economic position of uncertainty and growth in our own people’s distrust in the economic system, it would be negligent to not identify the threat of hyperinflation within the next 20 to 30 years.

In the case of the Commonwealth Bank hyperinflation can benefit borrowers or lenders depending on the climate. In a case that wages go up relative to hyperinflation, people who had already made lending agreements with the Commonwealth Bank will be able to pay the loan off early and while at the same price the real value would be less (Segal, 2021). In the case where wages do not increase with hyperinflation the Commonwealth bank can benefit from an increased amount in lending, as people will need more credit to buy inflated goods, but even in this case, it will be hard for the bank to calculate loan maturation in such a volatile climate resulting in undervalued repayments (Segal, 2021). Furthermore, if hyperinflation exceeds that of interest rates offered by the Commonwealth Bank people will likely remove their money from banks and put them into assets that will be less depreciatory, like gold, resulting in the commonwealth bank having less finance to make finical products.

**The Rise of Cryptocurrencies’ and Decentralised Finance**

     Cryptocurrencies while still in the early stages of development pose a large threat to the Commonwealth Bank, especially Decentralised finance (DeFi) which has grown substantially over the last few years (Behrens, 2021). DeFi is a blockchain network that provides finical products without the use of middlemen like banks and brokerages allowing them to offer higher incentives then regulatory banks (Sharma, 2021).

  Currently, DeFi platforms like PancakeSwap offer APY (Annual Percentage Yield) from 5% up to 120% return on investment, which dwarfs the interest rates currently offered by the Commonwealth Bank (PancakeSwap, 2021; Commonwealth Bank, 2021). staking pools are DeFi’s equivalent of savings accounts or term-deposit accounts (Ledger, 2020). In Staking pools your given cryptocurrency is held with set rules for removal of funds, typically 3 days to 2 weeks’ notice is needed to remove funds (Ledger, 2020). While your cryptocurrency is staked it is used for loans. Currently putting $1000 in an 83% APY PancakeSwap staking pool for a year gives a return of $830, where the 0.05% per annum interest rate offered by Commonwealth bank only returns $0.50 after a year in their savings account. It should be noted that one of the main differences between Commonwealth bank savings accounts and the staking pools offered on PancakeSwap is security. Commonwealth Bank offers you 100% security on your money, where using a decentralised finance sector there has and will continue to be hacking breaches on money staked and the volatility of the cryptocurrency staked. In the case of PancakeSwap staking pool the cryptocurrency used is Cake, and while you may get an 83% APY, the value of the token can depreciate by 99% within that year (unlikely with an established cryptocurrency) nullifying any benefits of the high APY. While a coin like Cake has a higher inherent risk than a savings account offered by the Commonwealth bank there are cryptocurrencies like USDC that are backed by the U.S. dollar (always remains 1 USDC is equal to 1 USD) that offer an APY of 4% once again dwarfing the offerings of the Commonwealth Bank (Foelber, 2021). While APY’s advertised over 10% are currently used as promotional tools to attract users, the fact that DeFi does not need middlemen taking a cut means that the 5% APY reported for cryptocurrencies like USDC will be sustainable for the next 20 to 30 years.

           South American Countries like El Salvador have already made Bitcoin legal tender and as Bitcoin has a limited supply unlike the U.S. dollar El Salvador’s currency is backed by. Also, DeFi is completely accessible through phones which is important to places like El Salvador where phone penetration is 146% and bank accessibility is 30% (Wintermeyer, 2021; Khatri, 2021). Widespread adoption of DeFi will be a slow process but the fact large companies (Microsoft, Tesla and Amazon) are beginning to adopt cryptocurrencies demonstrates that widescale adoption is not far away (Sandner, 2021). Wide-scale adoption in Australia over the next 20 to 30 years could lead to the Commonwealth Bank losing a large number of customers that move over to decentralised platforms to take advantage of their high APY and other finical product.

**Implications of Hyperinflation on the Commonwealth Bank**

At the start of this year, the talk of hyperinflation was still present as quantitative easing continued, but there was a consensus that we could recover from this position and the measures taken managed to curve a long-term recession (Mousina, 2021). This consensus could be jeopardised by economic hubs like Sydney and Melbourne going back into lockdown for a portion of this year as the long-term implication of COVID-19 remains uncertain and quantitative easing continues. Hyperinflation, while not as likely as to happen as the rise in Algorithmic trading and DeFi, is a problem that could further facilitate the rise in competitors in DeFi and Trading platforms. If we do enter hyperinflation it will only accelerate that process as people will want to move their assets into markets that will be less inflationary than Australian currency (Huang, 2020). By adopting a scenario plan for hyperinflation, we will not only develop the organisation to be prepared for hyperinflation in the next 20 to 30 years but we will also have a built-in contingency to protect against a more diverse range of competition in asset management and finical products. The three following strategies can be implemented over the next 20 years to ensure the Commonwealth Bank is prepared for the implications of hyperinflation.

***Long-term Loan Maturation***

The Commonwealth Bank currently offer long term loans for businesses for up to 30 years (Commonwealth Bank, 2021). Loans spanning this period could be affected by periods of hyperinflation within the next 20 to 30 years. While having long term loan repayments adjusted for the current rate of inflation may allow for the Commonwealth Bank to have loan repayments consistent with that of the inflation rate, it could result in many loans defaulting as the fluctuation of inflation in a period of hyperinflation can be upwards of 50% monthly (Tschach, 2000). Stopping the availability of loans that exceed 10 years may prove to be beneficial while we currently go through the uncertain economic period induced by COVID-19. Stopping long term loans will allow the Commonwealth Bank to be able to be more flexible in their approach to lending if we enter hyperinflation, and not be stuck in loans that will not return the expected value.

***CommSec Offer Cryptocurrencies***

        If in 20-30 years Australia goes through a period of hyperinflation the want for assets with a controlled supply like Bitcoin and Ethereum will increase as a store of value as a hedge against inflation, leading to further growth in platforms like Robinhood and PancakeSwap (Huang, 2020). CommSec is already a trusted platform in the stock exchange and by bringing in a team of trusted cryptocurrency advisers CommSec could build a platform that offers secure cryptocurrency, unlike other platforms that offer herds of scam cryptocurrencies.

***Increase the Incentives of Term Deposit Accounts***

        As previously stated, hyperinflation could lead to customers taking their money out of savings accounts and putting them in riskier products in an attempt to hedge against inflation. If a large enough amount of people withdraws their savings from the Commonwealth Bank it will limit their ability to offer loans and make money through other means of finical products. Currently due to the low-interest rates offered there are not many consumers using term deposit accounts (Maley, 2021). If the Commonwealth Bank begin to make term deposit accounts more appealing with higher rates they could be used as a good tool against the risk of customers withdrawing their money in times of hyperinflation. Offering bigger incentives on term deposits for locked-in periods for over 20 years could allow the Commonwealth Bank to have a secure amount of money during times of hyperinflation that can be used to make loans and buy products with a higher rate of return (Chen, 2021).

# Appendix

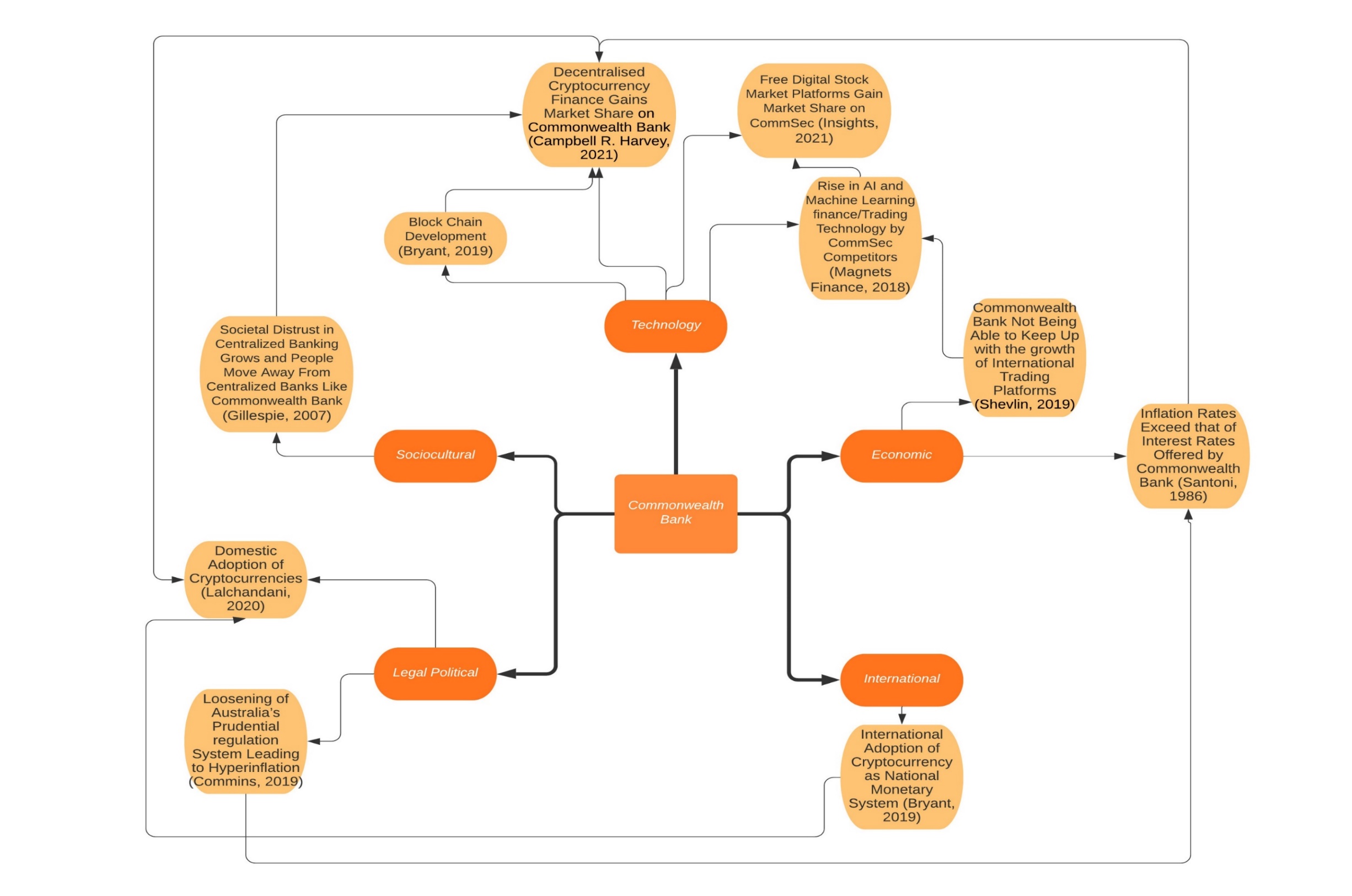


Figure : Mind Map

# References

Bryant, B. A. (2019). *THE MARKET FOR CRYPTOCURRENCY: HOW WILL IT EVOLVE?* Retrieved from World Scientific: https://doi.org/10.1142/S2194565919500192

Byrnes, N. (2017, Febuary 7). *Goldman Sachs Automated Trading Replaces 600 Traders With 200 Engineers*. Retrieved from MIT Technology Review: https://www.technologyreview.com/2017/02/07/154141/as-goldman-embraces-automation-even-the-masters-of-the-universe-are-threatened/

Campbell R. Harvey, A. R. (2021). *DeFi and the Future of Finance.* United States: John Wiley & Sons Inc (US).

Chen, J. (2021, April 29). *Term Deposit*. Retrieved from Investopedia: https://www.investopedia.com/terms/t/termdeposit.asp

Commins, P. (2019, May 21). *APRA loosens regulatory screws*. Retrieved from Financial Review: https://www.afr.com/policy/economy/apra-loosens-regulatory-screws-20190521-p51pno

Commonwealth Bank. (2020, August 31). *Find The Right Account For You*. Retrieved from Commbank: https://www.commbank.com.au/personal/accounts/comparison-table.html

Commonwealth Bank. (2021, September 2). *BetterBusiness Loan*. Retrieved from Commbank: https://www.commbank.com.au/business/loans-and-finance/business-loans/betterbusiness-loan.html

CommSec. (2017, July 27). Trading Terms and Conditions.

Curry, D. (2021, July 11). *Robinhood Revenue and Usage Statistics (2021)*. Retrieved from Business of Apps: https://www.businessofapps.com/data/robinhood-statistics/

David Lee, D. L. (2015). *Handbook of Digital Currency: Bitcoin, Innovation, Financial Instruments, and Big Data.* Elsevier Science.

Derwin, J. (2021, Feb 11). *CommSec adds 230,000 new accounts in 6 months*. Retrieved from Information Age: https://ia.acs.org.au/article/2021/commsec-adds-230-000-new-accounts-in-6-months.html

Foelber, D. (2021, July 5). *How Risky Is Coinbase's 4% Interest Rate On USD Coin?* Retrieved from The Motley Fool: https://www.fool.com/investing/2021/07/05/how-risky-is-coinbases-4-interest-rate-on-usd-coin/#:~:text=Coinbase%20(NASDAQ%3ACOIN)%2C,Coin%20(CRYPTO%3AUSDC).&text=Since%20it%20can%20be%20redeemed,hence%20the%20term%20%22stablecoin.%22

Gillespie, A. (2007). *Trust and Distrust: Sociocultural Perspectives.* Information Age Publishing, Incorporated: ISBN:9781607526322, 1607526328.

Google Trends. (2021, August 30). *Hyperinflation*. Retrieved from Google Trends: https://trends.google.com/trends/explore?date=all&q=%2Fm%2F03kd3

Huang, R. (2020, May 18). *Bitcoin vs. Inflation*. Retrieved from Forbes: https://www.forbes.com/sites/rogerhuang/2020/05/18/bitcoin-vs-inflation/?sh=3a7693f1c079

Insights, F. B. (2021, August 09). *Online Trading Platform Market to Reach USD 12.16 Billionin 2028; Utilization of Artificial Intelligence with Electronic Platforms to Aid Growth: Fortune Business Insights™*. Retrieved from Fortune Business Insight: https://www.globenewswire.com/news-release/2021/08/09/2276829/0/en/Online-Trading-Platform-Market-to-Reach-USD-12-16-Billionin-2028-Utilization-of-Artificial-Intelligence-with-Electronic-Platforms-to-Aid-Growth-Fortune-Business-Insights.html

Kenton, W. (2021, August 12). *Hyperinflation*. Retrieved from Investpedia: https://www.investopedia.com/terms/h/hyperinflation.asp

Khatri, A. (2021, June 7). *Did El Salvador Set Off A Domino Effect? Paraguay Congressman Hints At Legalizing Bitcoin*. Retrieved from Crypto Daily: https://www.cryptodaily.co.uk/2021/06/paraguay-bitcoin-el-salvador

Kinderlin, S. (2021, June 15). *An artificialIntelligence powered ETF has smashed the S&P 500 in the last month - without any meme stocks*. Retrieved from Market Insider: https://markets.businessinsider.com/news/stocks/artificial-intelligence-etf-aieq-sp-500-meme-stocks-2021-6#:~:text=A%20US%20equity%20ETF%20that,course%20correction%20after%20falling%20back.

Lalchandani, N. (2020). *Payments and Banking in Australia: From Coins to Cryptocurrency. How It Started, How It Works, and How It May Be Disrupted.* ISBN:9780648882435, 0648882438: Innovations Accelerated.

Ledger. (2020, May 25). *Staking vs Saving: Which Passive Income Option is Better?* Retrieved from Ledger: https://www.ledger.com/staking-vs-saving-which-passive-income-option-is-better

Luther, R. A. (2020, May 14). *Scenario Planning: Strategy, Steps and Practical Examples*. Retrieved from Oracle Netsuite: https://www.netsuite.com/portal/business-benchmark-brainyard/industries/articles/cfo-central/scenario-planning.shtml

Magnets Finance. (2018, August 14). *Can Robots Replace Day Traders on Wall Street?* Retrieved from Finance Magnets: https://www.financemagnates.com/thought-leadership/can-robots-replace-day-traders-on-wall-street/

Maley, K. (2021, May 10). *Why savers are turning their backs on term deposits*. Retrieved from Finnancial Review: https://www.afr.com/companies/financial-services/why-savers-are-turning-their-backs-on-term-deposits-20210509-p57q7o

Mousina, D. (2021, January 22). *Hyperinflation: addressing the concerns and risks in Australia*. Retrieved from AMP Capital: https://www.ampcapital.com/au/en/insights-hub/articles/2021/january/hyperinflation-addressing-the-concerns-and-risks-in-australia

PancakeSwap. (2021, August 31). *Syrup Pools*. Retrieved from PancakeSwap Finance: https://pancakeswap.finance/pools

Qin, X. (2012). Making Use of the Big Data: Next Generation of Algorithm Trading. *Proceedings of the 4th international conference on Artificial Intelligence and Computational Intelligence.* DOI:10.1007/978-3-642-33478-8\_5: https://www.researchgate.net/publication/262353524\_Making\_Use\_of\_the\_Big\_Data\_Next\_Generation\_of\_Algorithm\_Trading. Retrieved from Renmin University of China.

Reinkensmeyer, B. (2021, August 16). *Best Online Brokers Australia for 2021*. Retrieved from stockbrokers: https://www.stockbrokers.com/guides/best-brokers-australia

Sandner, P. (2021, Feburary 22). *Decentralized Finance Will Change Your Understanding Of Financial Systems*. Retrieved from Forbes: https://www.forbes.com/sites/philippsandner/2021/02/22/decentralized-finance-will-change-your-understanding-of-financial-systems/?sh=1b5a872e5b52

Santoni, G. J. (1986, March). *The Effects of Inflation on.* Retrieved from https://files.stlouisfed.org/files/htdocs/publications/review/86/03/Effects\_Mar1986.pdf?ref=HadiZayifla.Com

Segal, T. (2021, January 28). *Does Inflation Favor Lenders or Borrowers?* Retrieved from Invetoedia: https://www.investopedia.com/ask/answers/111414/does-inflation-favor-lenders-or-borrowers.asp

Sharma, R. (2021, March 24). *Decentralized Finance (DeFi) Definition*. Retrieved from Investopedia: https://www.investopedia.com/decentralized-finance-defi-5113835

Shevlin, R. (2019, July 8). *Amazon's Impending Invasion Of Banking*. Retrieved from Forbes: https://www.forbes.com/sites/ronshevlin/2019/07/08/amazon-invasion/?sh=4f6a046d7921

Taylor, D. (2020, April 6). *Coronavirus chaos has hit the economy and the RBA's approach to money printing is supposed to save it*. Retrieved from ABC News: https://www.abc.net.au/news/2020-04-09/coronavirus-economy-printing-money-quantitative-easing/12134560

Taylor, D. (2021, July 25 ). *Double-dip recession possible as COVID lockdowns ravage Australian economy*. Retrieved from ABC News: https://www.abc.net.au/news/2021-07-25/recession-possible-as-covid-lockdowns-ravage-australian-economy/100319202

Tschach, I. (2000). *The Impact of Inflation on Long-Term Housing Loans*. Retrieved from Econstor: https://www.econstor.eu/bitstream/10419/76905/1/wp055b.pdf

Volkering, S. (2018). *Crypto Revolution: Bitcoin, Cryptocurrency and the Future of Money.* ISBN: 9780648411604, 0648411605: Port Phillip Publishing.

Wintermeyer, L. (2021, August 27). *Could Developing Nations Follow El Salvador’s Move To Bitcoin?* Retrieved from Forbes: https://www.forbes.com/sites/lawrencewintermeyer/2021/08/05/could-developing-nations-follow-el-salvadors-move-to-bitcoin/?sh=2de78b1728b7