Cryptocurrency: Stage 6 Due Friday Week 12

Research:

Kheo	Jun	Jacqui
Mining	Blockchain:	Economic Freedom:
	A blockchain is a type of database made up of a connected line of groups of data. Each group of data is called a "Block". Each block is time-stamped with the exact moment it was created (The moment the block is completely filled with data), and has a set data size. Once all the space in a block has been filled with data, it is time-stamped and added onto the end of the current chain of blocks, and a new block is created. Blockchains are used in cryptocurrencies as a method of keeping track of cryptocurrency transaction data. Blockchains are essentially publicly viewable ledgers that anyone can add onto and verify. When blockchains are used within cryptocurrencies, the blockchain is almost completely irreversible as the blockchain of a cryptocurrency is a publicly viewable and editable database. Many different entities would have their own copies of the blockchain which can be compared and audited with other copies of the blockchain to make sure that transaction data is not retroactively edited.	While the data on bitcoin use in distressed regions of the world is promising, challenges remain for cryptocurrency to become a solution at scale for people facing economic oppression. There have been many studies on economic freedom around the world. Economic freedom clearly correlates with a high GDP per capita. Countries that have banned or over-regulated bitcoin are low on the economic freedom ranking and also have a low GDP per capita. These unfree regimes play a part in creating poverty for their people. Cryptocurrency gives freedom to individuals especially in third world countries and those under economic sanctions. The crypto market is easier to access than traditional banks due to less regulations and allows citizens to bypass governments and regulations to mine for cryptocurrency rewards to utilise, trade and convert for common goods to survive.
	retroactively edited.	

The cryptocurrency blockchain process starts off initially when a new transaction is entered. The cryptocurrency transaction is then sent to many different users of the cryptocurrency, who then verify the legitimacy of the transaction by solving equations. Once the transaction is confirmed to be legitimate, the transaction data is added to a block, along with other cryptocurrency transaction data. After the block is filled with transaction data, it is added to the chain of blocks and is almost impossible to change at this point. The transaction is logged and completed, and the cycle repeats again with another transaction.

Luke Conway. (2020). *Blockchain Explained* [Article]. Investopedia. https://www.investopedia.com/terms/b/blockchain.asp

The Economist. (2015). The great chain of being sure about things [Article]. Economist. https://www.economist.com/briefing/2015/10/31/the-great-chain-of-being-sure-about-things

Impact of cryptocurrencies

Opportunities and benefits to society:

World Currency Cryptocurrencies have the
potential to phase out
government-sanctioned
currencies, and provide the world
with a global currency (A currency
that doesn't have any set borders)
that could be used anywhere.

Risks and ethical issues

https://www.prescouter.com/2019/ 11/disadvantages-of-cryptocurren cies/

Ethical issues

https://link.springer.com/chapter/1 0.1007/978-3-030-10749-9 10 Confidentiality - Cryptocurrencies allow for anonymity. People can view the transactions that have occured, but do not necessarily know who is making the transactions.

Authentication - Cryptocurrency transactions are very easy to verify and are always public. As such, it is near-impossible to fake a cryptocurrency transaction. Storage Security - Once the cryptocurrency is stored in a secure offline location, it cannot be accessed by hackers and other nefarious entities that want the cryptocurrency, making cryptocurrency storage very secure.

Merchant Security - As cryptocurrency transactions cannot be recalled, merchants trading goods and services in exchange for cryptocurrencies do not need to worry about chargebacks or fraudulent transactions.

Decentralized Control - Not issued by any government, allowing it to keep its value even in an economic collapse.

International Usage - Allows for international transactions without exchange rates.

Inflation - They are immune against inflation and deflation, though it is prone to volatile changes in value.

Michael Dennis Doran. (2014). *A FORENSIC LOOK AT BITCOIN CRYPTOCURRENCY* [Paper]. ProQuest.

Cryptocurrency is developed and controlled, as well as the ethical issues that emerge when the entire Cryptocurrency system is examined, particularly in light of the Shariah code of ethics. Concerns regarding a lack of central control and government sway are examined in light of the potential for Cryptocurrency to become more dangerous.

Our investigation is based on an ethical perspective and employs an empirical analysis of Twitter tweets pertaining to Bitcoin. Specifically, we use innovative text-mining tools, similar to data mining, to gain insight into ethical issues associated with cryptocurrencies, and consider their potential for promoting universal acceptance.

https://www.tandfonline.com/doi/full/10.1080/23270012.2020.1790 046

Random sources

https://onlinelibrary.wiley.com/doi/full/10.1111/basr.12169

https://bennatberger.medium.com/the-ethics-of-bitcoin-is-the-cryptocurrency-better-for-banking-5379a780bcb5

https://www.proquest.com/docview/1527125660?pq-origsite=gscholar&fromopenview=true

Omar Alqaryouti1, Nur Siyam, Zainab Alkashri, and Khaled Shaalan. *Users' Knowledge and Motivation on Using Cryptocurrency* [Paper]. ResearchGate.

https://www.researchgate.net/profile/Khaled-Shaalan-2/publication/340737850 Users%27 Knowledge_and_Motivation_on_Using_Cryptocurrency/links/5ec04f9792851c11a86c6a84/Users-Knowledge-and-Motivation-on-Using-Cryptocurrency.pdf

A.Seetharaman , A.S.Saravanan, Nitin Patwa3, and Jigar Mehta. (2017). *Impact of Bitcoin as a World Currency* [Paper]. SciEduPress.

http://www.sciedupress.com/journ al/index.php/afr/article/view/11580 /7121

Stage Two (Team Project Proposal):

Due: The Project Proposal is Due 28/04 [week 7] (Actually Due 05/05) Proposal details can be posted to your Team website, which has a set of requirements, summarised below.

- This is the first stage of your team project, where you propose the chosen technology/topic which you will investigate. This will then be approved or reviewed.
- Potential topics/issues to be investigated are outlined in the text books by Baecker(2019) which presents a framework for computers and society and canvasses a wide range of topics supported by several case studies. Similarly the text by Kaczmarcyzk(2012) presents a set of relevant case studies.
- Please briefly describe your topic, its relevance and importance and why you have chosen it.
- Please outline your team members roles and responsibilities for activities they will undertake.
- Link to your Team Repository:

Team to confirm and post to Team website.

Stage 2 Work:

https://docs.google.com/presentation/d/16M9fXADSLS9IX1EwGrJfc9sBcE4Xqg8mZ7Lf8A463Rw/edit#slide=id.p

https://teams.microsoft.com/_#/pptx/viewer/teams/https:~2F~2Fautuni.sharepoint.com~2Fsites~2FComp501-semester1-2021aut~2FShared%20Documents~2FGeneral~2FTeam%20Project%20Proposal%20Presentation~2F1203.pptx?threadId=19:27f2d1a5f562424bb967cac271b88c1e@thread.tacv2&baseUrl=https:~2F~2Fautuni.sharepoint.com~2Fsites~2FComp501-semester1-2021aut&fileId=1abe1b91-54d4-4853-a4b2-75637c5633a6&ctx=files&rootContext=items_view&viewerAction=view

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Stage Three (Team Project Proposal Presentation):

Due: The Project Proposal Presentation is due 05/05/2021 [week 8] (Actually Due 07/05) Team to present via one [max] PowerPoint slide summarising the proposal and confirming direction of project.

The Project Proposal presentation is to be submitted to AUTOnline for Stage 3 files as above. Proposal details and updates can also be posted to your progressively developing Team website, addressing the set of requirements.

Stage 3 Work:

https://docs.google.com/presentation/d/1sui6kzo0Yr1z0nGRSAokZtUwvIeCoh2ol6-SuGVWC3s/edit#slide=id.p

(Outdated)

https://docs.google.com/presentation/d/16M9fXADSLS9IX1EwGrJfc9sBcE4Xqg8mZ7Lf8A463R w/edit#slide=id.p

https://teams.microsoft.com/_#/pptx/viewer/teams/https:~2F~2Fautuni.sharepoint.com~2Fsites~2FComp501-semester1-2021aut~2FShared%20Documents~2FGeneral~2FTeam%20Project%20Proposal%20Presentation~2F1203.pptx?threadId=19:27f2d1a5f562424bb967cac271b88c1e@thread.tacv2&baseUrl=https:~2F~2Fautuni.sharepoint.com~2Fsites~2FComp501-semester1-2021aut&fileId=1abe1b91-54d4-4853-a4b2-75637c5633a6&ctx=files&rootContext=items_view&viewerAction=view_

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Stage Four (Portfolio Progress Review):

Due: The Portfolio Progress Review is due in your lab session 19/05/2021 [week 10] Project details and updates can be presented via your Team website, demonstrating how you aim to address the set of requirements for the assignment.

Stage Five (Team Project Presentation):

Due: The Project Presentation is due 26/05/2021 [week 11]

Team to present via three [max] PowerPoint slides summarising the project and conclusions.

The Team Project Presentation is to be submitted to AUTOnline for Stage 5 files.

Proposal details and updates can also be posted to your progressively developing Team website, addressing the set of requirements.

Stage 5 Rubric is on the "CTiS_TeamProject_ProgressReview" slides.

Stage 5 Work:

https://docs.google.com/presentation/d/16_-D-9tBnYmgKPiryCWFcv06XazRN9L5LYyaCX3ThzQ/edit#slide=id.p

Stage Six (Team Project Portfolio Submission):

Due: The Project Portfolio is due 04/06/2021 midnight [week 12]

Team Components: Project details can be posted to your Team website, addressing the set of requirements outlined in the Home page on the Technology topic/issue and Process Support Pages. This site will be submitted as a Team Artefact. The Project Assessment Rubric gives guidance on how the Technology Topic/issue addressed by the site is to be marked. Requirements in the Process Support Pages include: Meeting Minutes link and files evidencing Teamwork, Project Portfolio link and any files evidencing your team's work. Quality guidelines indicate the expectations with respect to size of the site and number of its elements.