Low Risk Research Ethics Approval

Project title

LEVERAGING TWITTER SENTIMENT ANALYSIS TO ANTICIPATE BITCOIN VALUE

Record of Approval

Principal Investigator's Declaration

I request an ethics peer reviewI confirm that I have answered all relevant questions in this application honestly	X
I confirm that I will carry out the project in the ways described in this application. I will immediately suspend research and request an amendment or submit a new application if the project subsequently changes from the information I have given in this application.	X
I confirm that I, and all members of my research team (if any), have read and agree to abide by the code of research ethics issued by the relevant national learned society.	X
I confirm that I, and all members of my research team (if any), have read and agree to abide by the University's Research Ethics Policies and Processes.	X
I understand that I cannot begin my research until this application has been approved and I can download my ethics certificate.	X

Name: Vamsidhar Muchurami (7151CEM)

Date: 09/06/2022

Student's Supervisor (if applicable)

I have read this checklist and confirm that it covers all the ethical issues raised by this project fully and frankly.I also confirm that these issues have been discussed with the student and will continue to be reviewed in the course of supervision.

Name: Simon Billings

Date: 15/06/2022

Reviewer (if applicable)

Date of approval by anonymous reviewer: -

Low Risk Research Ethics Approval Checklist

Project Information

Project Ref	P137852
Full name	Vamsidhar Muchurami
Faculty	Faculty of Engineering, Environment and Computing
Department	School of Computing, Electronics and Maths
Supervisor	Simon Billings
Module Code	7151CEM
EFAAF Number	
Project title	LEVERAGING TWITTER SENTIMENT ANALYSIS TO ANTICIPATE BITCOIN VALUE
Date(s)	08 Jun 2022 - 01 Aug 2022
Created	08/06/2022 17:37

Project Summary

As technology advances in the 21st century, the currency is changing to decentralized networks. Bitcoin is the cryptocurrency that came into existence to effectively challenge and help people with transactions around the world without any hassle. Bitcoin is the currency that helps people store and transact their wealth without any 3rd party. Though many investors and businesses are backing the crypto assets it is considered to be highly volatile despite their contribution to society. Influencers and Billionaires like Elon Musk, Kevin O'Leary, Gary Vee etc., through their social media accounts, might be responsible for the Bitcoin value fluctuations.
In this thesis, by recognising the issue using social media like Twitter how people's opinions on Bitcoin price are increasing by the force of only a single entity and/or the huge number of people boosting the price. This will help key investors' behaviour in investing or selling the stock. The vision of this project is to use statistical analysis and data mining techniques to conclude social media influence and bitcoin price.

Names of Co-Investigators and their organisational affiliation(place of study/employer)	-
Is this project externally funded?	No
Are you required to use a Professional Code of Ethical Practice appropriate to your discipline?	No
Have you read the Code?	No

Project Details

What are the aims and objectives of the project?	To anticipate value fluctuations by Twitter sentiment analysis on Bitcoin.
Explain your research design	1.Downloading the data from Kaggle https://www.kaggle.com/datasets/kaushiksureshh147/bitcoin-tweets. 2.Analysing, cleansing, and pre-processing it. 3.Finding the subjective and polarity of the data. 4.Calculating the sentiment score of tweets. 5.Applying data mining techniques. 6.Evaluating the developed project. 7.Concluding the research.
Outline the principal methods you will use	data source: Kaggle https://www.kaggle.com/datasets/kaushiksureshh147/bitcoin-tweets. Calculating the sentiment score of tweets, Applying data mining techniques, and showing the correlation of tweets with bitcoin price.
Are you proposing to use a validated scale or published research method/tool?	No

Data Analysis

Does the research seek to understand, identify, analyse and/or report on data/information on terrorism/terrorism policies?	No
Does your research seek to understand, identify, analyse and/or report on information for other activities considered illegal in the UK and/or in the country you are researching in?	No
Are you analysing Secondary Data?	Yes
Is this data publicly available?	Yes
Could an individual be identified from the data? e.g. identifiable datasets where the data has not been anonymised or there is risk of re-identifying an individual	No
Are you dealing with Primary Data involving people?	No
Are you dealing with personal data?	No
Are you dealing with special category data (formerly known as sensitive data)?	No
Is the project solely desk based secondary research?	Yes
Will the data collection, recruitment materials or any other project documents be in any language other than English?	Yes
Are there any other ethical issues or risks of harm raised by the study that have not been covered by previous questions?	No

External Ethics Review

Question			Yes	No
1	Will this project be submitted for ethical review to an external organisation?			X
	Name of external organisation			
2	Are you submitting to IRAS?			
3	Has this project previously been reviewed by an external organisation?			

Languages

Question		Yes	No
1	Are all or some of the consent forms, information sheets and research instruments associated with this project likely to be used in languages other than English?		X
	Specify the language[s] to be used		