Plan Overview

A Data Management Plan created using DMPonline

Title: Leveraging Blockchain & Distributed Ledger Technologies for a Sustainable Economy and Society

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Project abstract:

Modern slavery is a complex crime and there are many organisations, viz. charities, NGOs, law enforcement agencies etc., involved in tackling it. This, when combined with the extreme sensitivity of the data, in turn poses major challenges in coordinating the communication between these organisations. We believe that a trusted decentralised network, based on the blockchain distributed ledger technology, has the potential to greatly facilitate such communication making their collaboration more effective. This is particularly true in the worldwide case, where the challenges of international communication become harder. In particular the way in which the system permits organisations to freely join it with minimal barriers, will allow an initially established network to organically expand its reach. Creating such a self-sustaining network of information exchange to fight the scourge of modern slavery is the underlying drive behind the proposed work in this project. Our vision is to put in operation this trusted decentralised network in five key countries on the modern slavery map in five years, and to reach 193 countries ultimately. To this end, we have been actively developing partnerships with appropriate organisations locally in Manchester. The relationship and connections with the Greater Manchester Police has been valuable due to its proximity and the Programme Challenger, GMP's specialist anti-slavery unit, comprehensive coverage of services to support modern slavery victims. We propose to use this project to conduct a series of discussions with potential users within GMP to produce a specification for a realistic deployable prototype. Outside the UK, we have forged a relationship with MeKong Club who has a significant presence in East Asia and has already teamed up with Diginex using blockchain to enhance labour contract transparency, and ACET (Analytical Center of Excellence on Trafficking). Teaming up with MeKong club will help to extend our work to East Asia quickly.

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Leveraging Blockchain & Distributed Ledger Technologies for a Sustainable Economy and Society

Manchester Data Management Outline

1. Will this project be reviewed by any of the following bodies (please select all that apply)?

- None of the above

2. Is The University of Manchester collaborating with other institutions on this project?

- Yes - Part of a collaboration and not handling data

3. What data will you use in this project (please select all that apply)?

- Generate textual supporting information only

will use simulated cases

4. Where will the data be stored and backed-up during the project lifetime?

- University of Manchester Research Data Storage Service (Isilon)

5. If you will be using Research Data Storage, how much storage will you require?

- 1 - 8 TB

6. Are you going to be working with a 3rd party data provider?

- No

7. How long do you intend to keep your data for after the end of your project (in years)?

- 0-4 years

Questions about personal information

Personal information, also known as personal data, relates to identifiable living individuals. Special category personal data is more sensitive information such as medical records, ethnic background, religious beliefs, political opinions, sexual orientation and criminal convictions or offences information. If you are not using personal data then you can skip the rest of this section.

Please note that in line with data protection law (the General Data Protection Regulation and Data Protection Act 2018), personal information should only be stored in an identifiable form for as long as is necessary for the project; it should be pseudonymised (partially de-identified) and/or anonymised (completely de—identified) as soon as practically possible. You must obtain the appropriate ethical approval in order to use identifiable personal data.

8. What type of personal information will you be processing (please select all that apply)?

- No sensitive or personal data

9. Please briefly outline how you plan to store, protect and ensure confidentiality of the participants' information.

Not applicable

10. If you are storing personal information (including contact details) will you need to keep it beyond the end of the project?

- Not applicable

11. Will the participants' information (personal and/or sensitive) be shared with or accessed by anyone outside of the University of Manchester?

- Not applicable

12. If you will be sharing personal information outside of the University of Manchester will the individual or organisation you are sharing with be outside the EEA?

- Not applicable

13. Are you planning to use the personal information for future purposes such as research?

- No

14. Who will act as the data custodian for this study, and so be responsible for the information involved?

Myself, PI

15. Please provide the date on which this plan was last reviewed (dd/mm/yyyy).

2019-07-16

Assessment of existing data

Provide an explanation of the existing data sources that will be used by the research project, with references

simulated cases for testing the blockchain distributed ledger which is installed on client's server.

Provide an analysis of the gaps identified between the currently available and required data for the research

no gap; use simulated data only

Information on new data

Provide information on the data that will be produced or accessed by the research project

modern slavery cases, not no data that will be subject to GDPR

Quality assurance of data

Describe the procedures for quality assurance that will be carried out on the data collected at the time of data collection, data entry, digitisation and data checking.

simulated data based on data fields suggested by practitioners

Backup and security of data

Please describe the data back-up procedures that you will adopt to ensure the data and metadata are securely stored during the lifetime of the project.

Back up not necessary as one can alwasy re-simulate

Management and curation of data

Outline your plans for preparing, organising and documenting data.

we plan to consult the stakeholders regardings the fields needed on the blockchain. Then we simulate artificial records to test the blockchain.

Difficulties in data sharing and measures to overcome these

If you expect obstacles to sharing your data, explain which and the possible measures you can apply to overcome these.

Not applicable

Consent, anonymisation and strategies to enable further re-use of data

Make explicit mention of the planned procedures to handle consent for data sharing for data obtained from human participants, and/or how to anonymise data, to make sure that data can be made available and accessible for future scientific research.

Not applicable

Copyright and intellectual property ownership

Please state who will own the copyright and IPR of any new data that you will generate.

Not applicable

Responsibilities

Outline responsibilities for data management within research teams at all partner institutions

Not applicable

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