Plan Overview

A Data Management Plan created using DMPonline

Title: Evaluating Stakeholder Perspectives on Smart Street Lighting: A Multi-Dimensional Framework

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Project Administrator: M

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Template: TU Delft Data Management Plan template (2021)

Project abstract:

The goal of this research can be envisaged as a two-part endeavor. First, we aim to develop a comprehensive framework that encapsulates both the relevant key stakeholders and the domains of impact, both tangible and intangible, related to public projects. This framework will be instrumental in providing a holistic view of public projects and their multidimensional influences. The key stakeholders represent the different entities involved in or affected by the project, each with their unique perspectives, interests, and influence. The domains of impact, on the other hand, represent the different ways in which the project can potentially affect the community and the environment, covering both quantifiable and less easily measurable effects. The second part of the research will involve applying this framework in a real-world context, specifically, a potential smart street light project in Amsterdam. This will involve identifying the key stakeholders for this specific project, which could range from city administrators and technology providers to local businesses, residents, and environmental groups, among others. Here we investigate:

How do stakeholders assess the potential tangible and intangible impact of public projects?

The domains of impact will be explored, including aspects like economic cost and benefits, improved safety and security, energy efficiency, potential environmental impacts, and more subjective areas like residents' perceptions and feelings of community. The data will be collected through interviews with 20 respondents across 4 stakeholder groups (RACI). These interviews will be recorded, transcribed, and then stored in a secure Google Drive cloud environment, protected by 2-factor authorization. In the final report, the respondents will be anonymized and referred to as R1, R2 etc. After completion of the research, all data will be deleted as well as the email correspondence that led up to the interviews.

ID: 127643

Start date: 03-07-2023

End date: 30-09-2023

Last modified: 03-09-2023

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0. Administrative questions

1. Name of data management support staff consulted during the preparation of this plan.

No support staff was asked for consultancy due to the harmless nature of this research.

2. Date of consultation with support staff.

I. Data description and collection or re-use of existing data

3. Provide a general description of the type of data you will be working with, including any re-used data:

Type of data	File format(s)	How will data be collected (for re- used data: source and terms of use)?	Purpose of processing	Storage location	Who will have access to the data
Interviews	.mp3 files	Microsoft Teams	In order to clarify the data when the auto-transcript feature fails to capture certain words.	Microsoft Teams	Researcher + supervisor
Transcripts	docv	recordings (also through MT built-in feature)	To perform thematic analysis to understand the impact considerations of different stakeholders in the field of smart street light at the start of such a projects.	Microsoft Teams	Researcher + supervisor

4. How much data storage will you require during the project lifetime?

• < 250 GB

II. Documentation and data quality

5. What documentation will accompany data?

• Methodology of data collection

III. Storage and backup during research process

6. Where will the data (and code, if applicable) be stored and backed-up during the project lifetime?

• Another storage system - please explain below, including provided security measures

Storage platform: Microsoft Teams

Security measure 1: During the research: the data can only be accessed by the researcher and the responsible researcher through Microsoft Teams.

Security Measure 2: after the research, all data will be destroyed

IV. Legal and ethical requirements, codes of conduct

7. Does your research involve human subjects or 3rd party datasets collected from human participants?

• Yes

8A. Will you work with personal data? (information about an identified or identifiable natural person)

If you are not sure which option to select, first ask your <u>Faculty Data Steward</u> for advice. You can also check with the <u>privacy website</u>. If you would like to contact the privacy team: privacy-tud@tudelft.nl, please bring your DMP.

• Yes

Voice will be recorded during the interviews.

8B. Will you work with any other types of confidential or classified data or code as listed below? (tick all that apply)

If you are not sure which option to select, ask your <u>Faculty Data Steward</u> for advice.

- Yes, data which could lead to reputation/brand damage (e.g. animal research, climate change, personal data)
- Yes, confidential data received from commercial, or other external partners

Among the stakeholders, two types of commercial parties will be interviewed: manufacturers and technology providers. During the interviews, these stakeholders could potentially expose sensitive information about their company's practices.

9. How will ownership of the data and intellectual property rights to the data be managed?

For projects involving commercially-sensitive research or research involving third parties, seek advice of your <u>Faculty Contract Manager</u> when answering this question. If this is not the case, you can use the example below.

All of the data that is inputted by the respondents is their own intellectual property and therefore, the entire recording or part of the recording can be removed at any point in time. This is mentioned in the consent form as well.

Regarding the final report, all input will be anonymized in such a way that it can't be traced back to a specific person or company.

10. Which personal data will you process? Tick all that apply

- Names and addresses
- Email addresses and/or other addresses for digital communication
- Gender, date of birth and/or age
- Signed consent forms
- Data collected in Informed Consent form (names and email addresses)

11. Please list the categories of data subjects

- 1. Manufacturers of street lights
- 2. Tech-companies that provide smart street lighting solutions
- 3. Residents of Amsterdam
- 4. City officials of Amsterdam/Nijmegen/Helmond/Den Hague/Schiedam

12. Will you be sharing personal data with individuals/organisations outside of the EEA (European Economic Area)?

• No

15. What is the legal ground for personal data processing?

Informed consent

16. Please describe the informed consent procedure you will follow:

All study participants will be asked for their written or verbal consent for taking part in the study and for data processing before the start of the interview.

17. Where will you store the signed consent forms?

• Same storage solutions as explained in question 6

18. Does the processing of the personal data result in a high risk to the data subjects?

If the processing of the personal data results in a high risk to the data subjects, it is required to perform a <u>Data Protection Impact Assessment (DPIA)</u>. In order to determine if there is a high risk for the data subjects, please check if any of the options below that are applicable to the processing of the personal data during your research (check all that apply).

If two or more of the options listed below apply, you will have to <u>complete the DPIA</u>. Please get in touch with the privacy team: privacy-tud@tudelft.nl to receive support with DPIA.

If only one of the options listed below applies, your project might need a DPIA. Please get in touch with the privacy team: privacy-tud@tudelft.nl to get advice as to whether DPIA is necessary.

If you have any additional comments, please add them in the box below.

• None of the above applies

22. What will happen with personal research data after the end of the research project?

• Personal research data will be destroyed after the end of the research project

V. Data sharing and long-term preservation

27. Apart from personal data mentioned in question 22, will any other data be publicly shared?

• All other non-personal data (and code) produced in the project

Transcripts will be shared in the appendix of the master thesis report, however these transcripts will contain no PI data.

29. How will you share research data (and code), including the one mentioned in question 22?

• All anonymised or aggregated data, and/or all other non-personal data will be uploaded to 4TU.ResearchData with public access

30. How much of your data will be shared in a research data repository?

• < 100 GB

31. When will the data (or code) be shared?

• At the end of the research project

32. Under what licence will be the data/code released?

• CC BY-SA

VI. Data management responsibilities and resources

33. Is TU Delft the lead institution for this project?

• Yes, the only institution involved

34. If you leave TU Delft (or are unavailable), who is going to be responsible for the data resulting from this project?

The Head of the Department of the Best Experiments (hod-bestexperiments@tudelft.nl)

35. What resources (for example financial and time) will be dedicated to data management and ensuring that data will be FAIR (Findable, Accessible, Interoperable, Re-usable)?

4TU.ResearchData is able to archive 1TB of data per researcher per year free of charge for all TU Delft researchers. We do not expect to exceed this and therefore there are no additional costs of long term preservation.