DSC-166 National Assembly for Wales consultation on the Children's Bill

2019-05-22

This project analyses free text responses to a consultation gathering opinions on a recent Welsh Government Bill - the Children (Abolition of Defence of Reasonable Punishment) (Wales) Bill ("the Bill") - introduced by Julie Morgan AM, Deputy Minister for Health and Social Services.

Team members

- Chaitanya Joshi

Impact (see the impact assessment framework for further details)

Which of the Campus strategic objectives would this project deliver, and how? 'Deliver better statistics, and strengthen the evidence for policy-making and public services': Supports the Welsh government to make evidence-based decisions.

'Strengthen our ability to understand the economy and society by assessing the value of new data sources and techniques': Explores opinions of the general public on an issue of great societal importance

What is the policy impact? Why is this project important? Supports Welsh Assembly colleagues in analysis and decision making. The findings might influence policymakers to decide on a subject which is expected to split the public opinion. * How will decision-making be improved? And what impact will this have on the lives of citizens? Data science techniques to quickly analyse the responses and findings. The response rate in the consultation is expected to be one of the highest in recent years.

- How will operational efficiency or value for money be improved? What will be the impact of this? Substantial saving on resources in terms of analysing hidden topics and structures in the data beyond the capability of manual analysis.

- What is the impact of not doing this on our reputation? negative impact for not aiding the local government in timely analysis of the evidence on a topic which is very crucial for society.
- How will learning be shared beyond the initial project? (e.g. through re-use, understanding data, best practice etc.) Analysis of data science skills will be published in report/blogs etc. Findings will be presented to the Assembly members.

**What is the technical impact? * What is the data science you are expecting to use, and why is this interesting? (e.g. algorithms, ML methods, programming languages etc.) NLP techniques- most frequent word collocation, tf-idf methods for keyword extraction, and context for keywords.

- Will the data use new or novel data sources or use existing datasets in novel ways? Campaign responses from Smart Survey.

Why should the Campus do it? * how does the project use the Campus' USP? Python and NLP techniques developed in house. (Re-use) Knowledge gained from work done for DIT trade consultation. It is important for the Campus to take this project and further improve its reputation in influencing decision making in key policy areas.

Portfolio balance and stakeholders Understanding society. * Who are the stakeholders? (Include the client and any other stakeholders e.g. collaborators, data suppliers, and also potential customers for re-use, if known at this stage) National Assembly for Wales

Project management * State the problem to be solved / draft research question To analyse free text responses to a consultation gathering opinions on a recent Welsh Government Bill - the Children (Abolition of Defence of Reasonable Punishment) (Wales) Bill ("the Bill") - introduced by Julie Morgan AM, Deputy Minister for Health and Social Services. * Are there any key deadlines? Or can the project start at any time? The project to be delivered towards the end of June. * Do you know what data sources are to be used, and if so what? How will these be accessed, including any likely security clearance requirements? Smart Survey Data to be shared with the Campus which will be stored in a secured restricted access Workspace. * How do we know the client is committed to this, and that it is a priority for them The client has expressed their inability to analyse the themes present in the responses without our help.

- What are the risks and uncertainties? (These can be explored further in the discovery phase, if the project is accepted) Low volume of data will not allow data-intensive methods like topic modelling etc to be applicable.

Code and outputs

Code can be made public once the results of the consultation are made public. * What are the outputs? For example, a data product, repo, paper. Report for

the Assembly members and a joint blog to be published on the Campus website.

Github repo: https://github.com/datasciencecampus/consultation_analysis_nafw

Related and existing work

Delivery

- [x]April 2019
- [x] Weekly analysis performed until the final data ingestion 30th May 2019.
- [x] Report shared with the Assembly members end of June 2019
- [x] Early July 2019 analysis to be presented to the Assembly members.

Further information

Please contact datasciencecampus@ons.gov.uk for more information.

Updates

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Chaitanya Joshi wrote a report on this work in September 2019.

The National Assembly for Wales produced a blog post on this work too.