DSC-73 Analysis of consultation results for the Department of International Trade

2018-08-15

Can data science improve on traditional analyses of consultation responses?

The UK is preparing for an independent trade policy once the UK leaves the EU and the Department for International Trade (DIT) will be responsible for running an independent trade policy for the UK post-EU. DIT has launched four public consultations seeking public opinion on four future trade negotiations (US, New Zealand, Australia and joining the Trans-Pacific Partnership). DIT is expecting a large volume of responses to these consultations and has commissioned the Data Science Campus to analyse the textual responses using advanced machine learning techniques.

DIT will also be analysing the responses using human processes, so this project provides an excellent opportunity to test the data science approach against the 'ground truth', and ask the following questions:

- Is it faster?
- Is the quality as good?
- Can we trust the answers?
- Can we do more with the data science approach?

Team members

- Louisa Nolan
- Chaitanya Joshi
- David Pugh

The need

DIT are looking for automated analysis of ~100,000 responses (predicted), between now and December.

Impact

The analysis is likely to include topic modeling, sentiment analysis and some summary statistics, which will create a dashboard updated weekly. The consultation covers 4 countries / areas - Australia, New Zealand, USA, the Trans-Pacific Partnership, split by 5 sectors.

Data science

Natural Language Processing (NLP) techniques (Latent Dirichlet Allocation, Non-Negative Matrix Factorization, Term Frequency-Inverse Document Frequency and Sentiment Analysis etc.)

Stakeholders

- Department for International Trade (DIT)

Code and outputs

Project proposal document - DIT consultation.docx

Further information

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

Updates

- No updates yet.