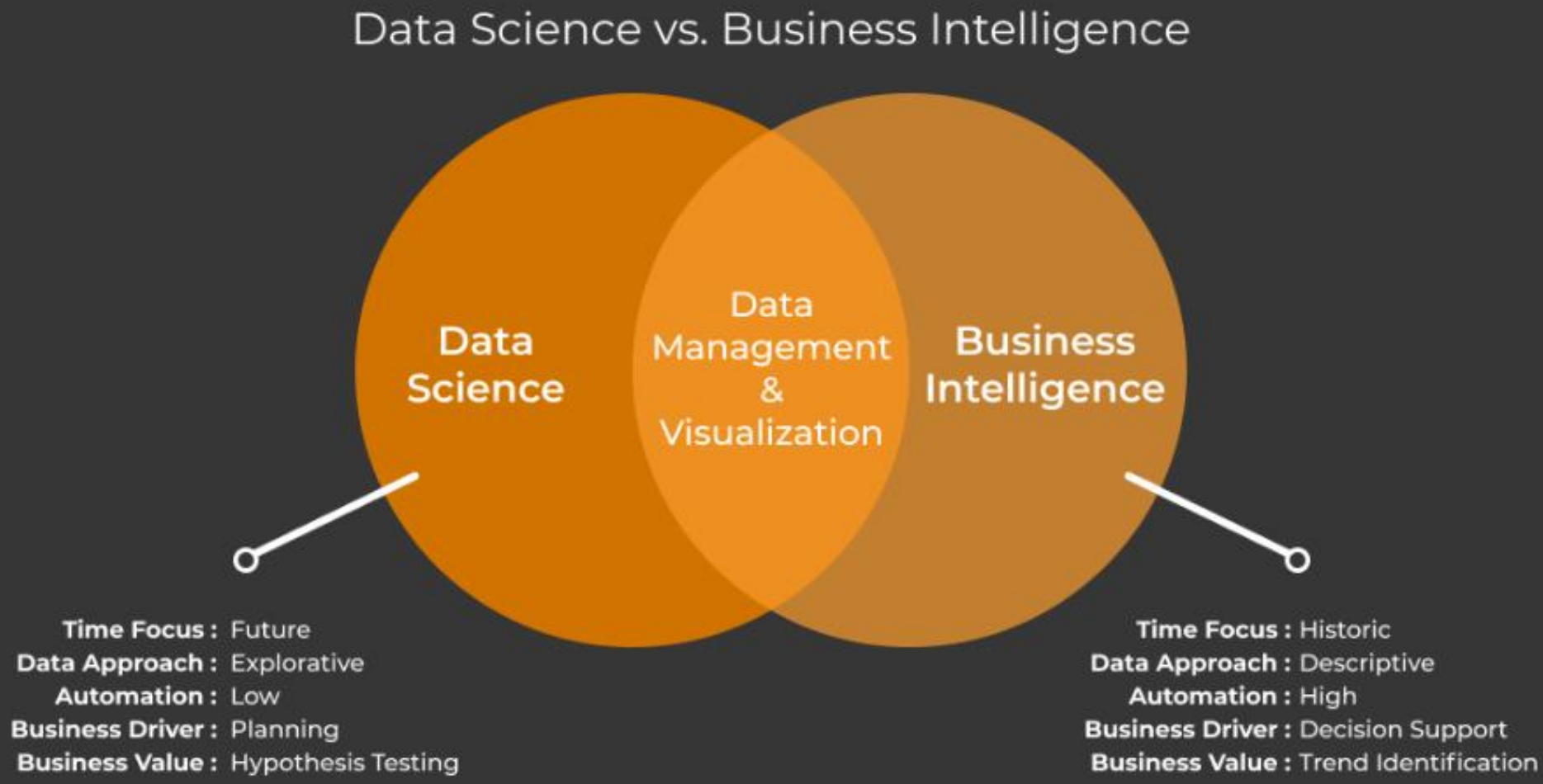
Devon & Cornwall POLICE Performance

The Police Service Modelling Associates (PSMA) Programme

Partner Perspective

Policing Lab Virtual Event
Research and Practice in Conversation
December 2021

Introduction



Analytics – The Future

- Introduction to OR, Data Science and Programming (Python and R)
- Machine Learning
- Modelling Pathway And Queuing Problems
- Natural Language Processing
- Modelling Whole Systems
- Forecasting
- Geographic Modelling and Visualisation
- Open Source Collaborative Development
- Modelling Behaviour

Operational Research uses modelling, simulation and analysis techniques to help *inform decisions* about the *operational management* of an organisation.

e.g. *Where are the delays in our Emergency Department processes, and how do we reduce them?*

Data Science uses data-led approaches such as Artificial Intelligence and Data Analysis to generate insights from data.

e.g. *Can we teach a machine to predict when an Emergency Department is going to breach the four hour target?*

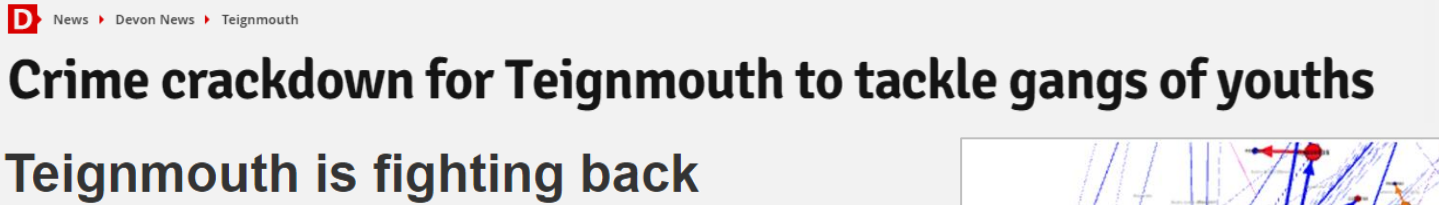
Gaps and Challenges

Appetite

Software

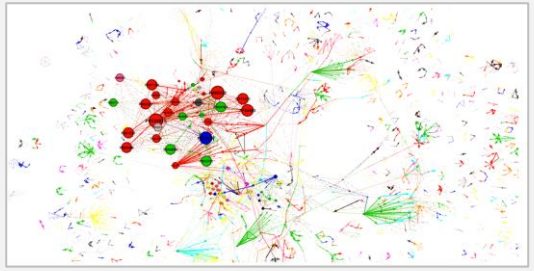
Skills and Capability

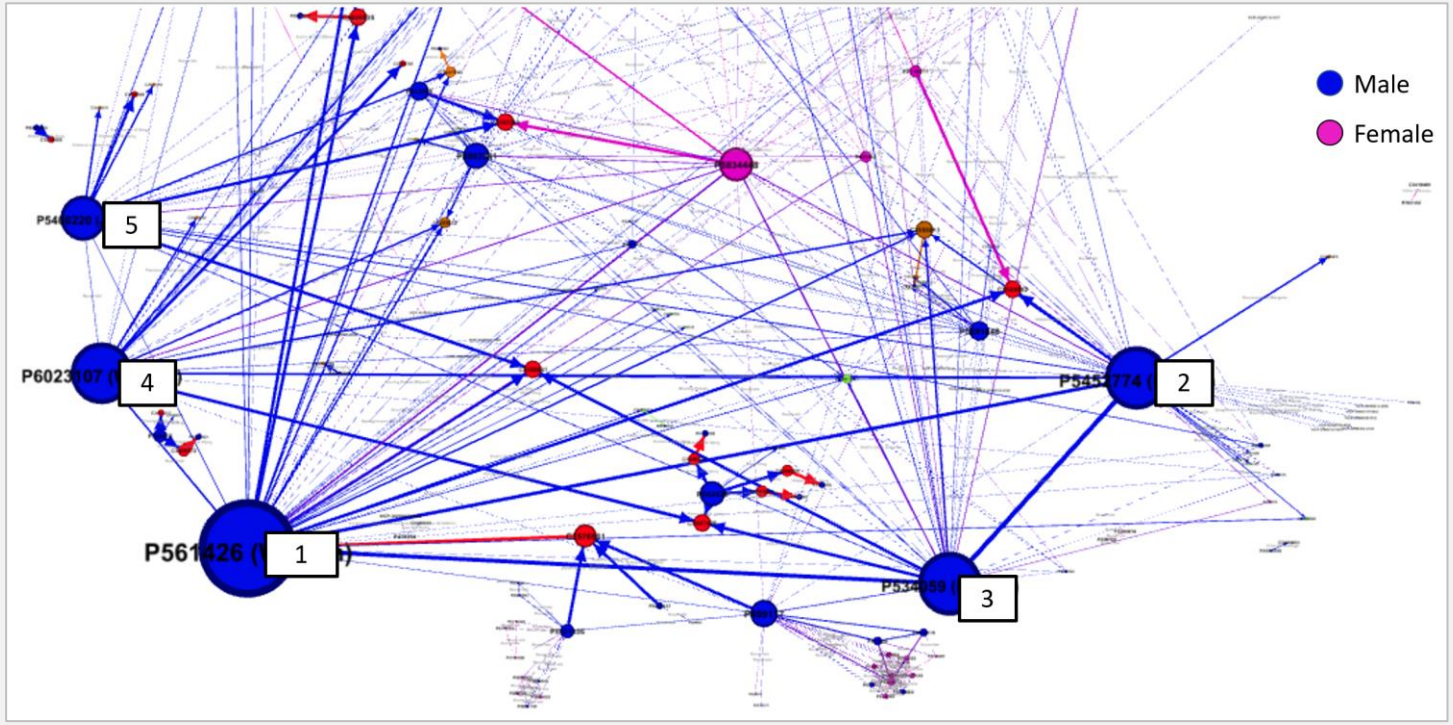
Opportunity – An Evidence-Based Approach



The Method: Trialling the Approach

The Method: Applying it to the 'real world'





Benefits and Learning

Appetite

Software

Skills and Capability

Ethics

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