Medway Youth Trust HIDDEN PATTERNS

`Predictive Risk Modeling and its importance to NEET Prevention'

John Paton Business Manager





Medway Youth Trust NEET PREVENTION IN MEDWAY

- Tracking
- •Caseload Management
- •CCIS
- •RONI
- •RPA





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Gary Seaman Data Quality Manager





Medway Youth Trust NEET PREVENTION

- •The 'Big' Issue
- •The Solution & Process
- Demonstration
- Outcome of Model
- •One Year on
- •RPA The Future





Medway Youth Trust THE BIG ISSUE

•NEET's Rising – Less Resources

•Disparity between Text & Recorded Destination

•Early Identification & Prevention





Medway Youth Trust THE SOLUTION

- •IBM SPSS Modeler
- •CCIS Rich Data Source
- •360 Degree Client View





Medway Youth Trust THE PROCESS

•Combine CCIS data to have a single record that describes clients

- •Contacts, targets, destinations, categories, special needs, benefits, disabilities
- •Text mining look for key concepts
 - Compile a dictionary
 - •Group terms into word subjects (types)
 - Create categories and build a model
 - •Score each case on key concepts





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DEMONSTRATION





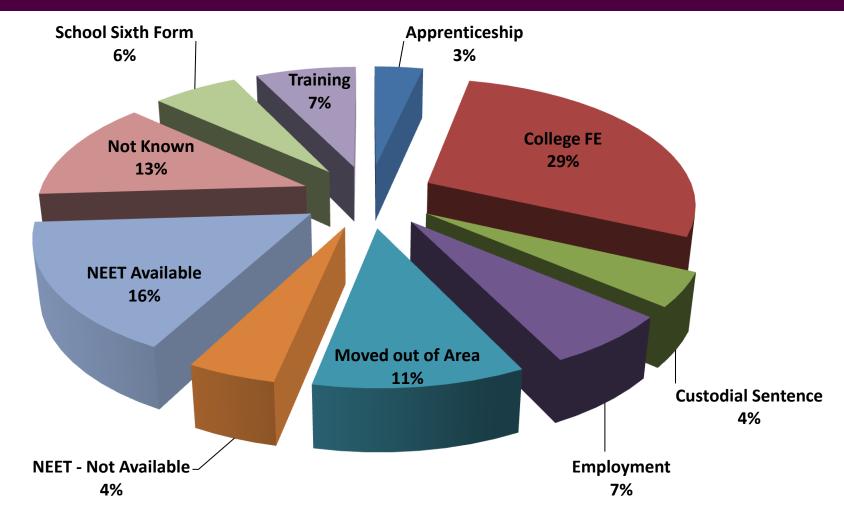
Medway Youth Trust OUTCOME OF MODEL

- Two models were produced
- •Built a composite model to predict NEET
- •Scored clients as most likely to be NEET
- •Selected 723 as most likely candidates
- •Previously searched 10,000 clients





Medway Youth Trust ONE YEAR ON



Of the 723 identified as having a propensity to become NEET from our model. 52% have progressed into EET.

Medway Youth Trust RPA THE FUTURE

•Create specific Models – Identify those who are better suited to Apprenticeships, Training or Employment with Training

•Improved Data Sharing – Analyse more data to improve Model performance

•Risk of NEET Indicators – Embedding Analytics into your day to day activities

•Bespoke local CCIS – Collect and analyse data local to your area





Medway Youth Trust THE EVIDENCE

IBM – MYT YouTube Video <u>http://www.youtube.</u> <u>com/watch?v=eow Y</u> <u>ggeBgM&feature=pla</u> <u>yer_embedded</u>

Medway Youth Trust CONTACT

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