Fraud and Error in the Social Security System

Data Matching

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Fraud and Error – Data Matching

Why ?

- Public expectations – Government has huge amounts of data
- Minimising need for manual checking
- Opportunities offered by automation
- Efficiencies offered by bulk data matching
- Identifying fraud and error before it enters the system
- Identifying fraud and error already in system at earliest opportunity

Fraud and Error – Data Matching

How

- Currently focused on detection regular scans run against DWP and other data
- Rules developed to target areas and claimants of highest risk
- Creates referrals which are subject to risk analysis or handed off to other public authorities
- Increasing emphasis on preventative activity – matching against earnings / income information at new claim stage; using credit reference data

Data Matching – Current Features

- Wide range of data, sourced and ‘marshalled’ into customer-centric view -‘holistic’ picture of an individual, benefit unit (i.e. couple) and household
- Historical data retained
- Environment fully managed by DWP
- All development possible by DWP staff for flexible and cost effective service
- Stringent security model and legal approvals procedure for each matching activity
- Bespoke referral management systems to enable operational staff to access cases needing investigation/action
- Scans produced for ad hoc and Other Government Department requirements
- Evolved from 19 years of experience

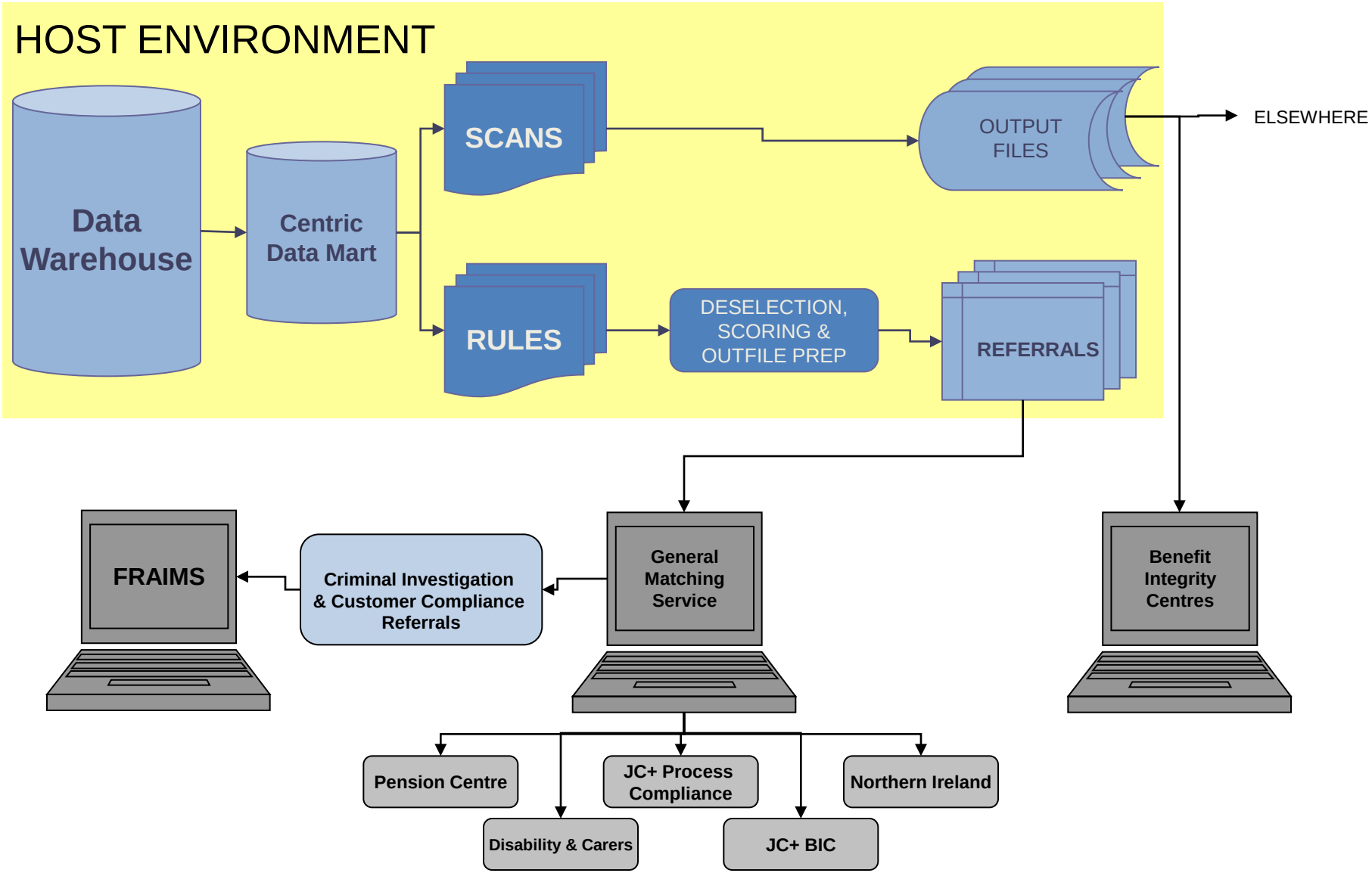
Data Matching – Current Features

One of Europe's largest data repositories

- State Pension
- England, Scotland & Wales Prisoners
- Disability Living Allowance
- HMRC Savings & Earnings
- Carers Allowance
- Royal Mail Address List
- Child Benefit
- NHS Prescriptions
- Customer Information System
- Student Loan Applications
- Employment & Support Allowance
- Employer Payroll
- Housing Benefit
- Tax Credits
- Industrial Injuries (Customer)
- Council Tax Benefit
- Income Support
- Job Seekers Allowance
- Overseas Benefits
- Pension Credit
- Housing Benefit

…plus numerous others

Centric Components - Diagram



Centric Components

- Information and Data Services ingest data from a range of DWP and external sources on varying frequencies from daily to 6 weekly
- Some of these sources are used to feed the Centric Data Mart including snapshot extracts designed several decades ago specifically for operational data matching; others come from specific extracts used for a variety of IGS information services
- The Centric Data Mart is updated once a week with recently updated data from the sources used.
- Most tables in the Centric Data Mart contain a current record and up to 5 years history
- Where no or limited history is kept this normally signifies a data sharing agreement does not allow for this e.g. Ministry of Justice Prisoner table only contains latest week snapshot of open prison spells.
- Rule products are used purely for F&E identification purposes. They adhere to a range of standards so as to leverage pre-built capability that enables:
  - Controls to be applied that avoid referring the same benefit claim under the same or similar rules multiple times into the business (deselection)
  - Onward transfer of referrals to several external case management systems including FRAIMS
- Rules are generally scheduled to run only when there is new data from at least one of the sources used in them
- Scans are any other operational data matching product running on Centric that does not send its output toanother DWP system. These are for a mix of F&E and other purposes e.g. automating or speeding up business decision making by reuse of information, verifying DWP customers who have a passported entitlement to external offers e.g. free prescriptions, fuel bill reductions
- Scans include a range of products delivered to the Business Integrity Centres for further investigation

Rule Example

- This rule is looking to identify potential overpayments of Pension Credit (PC) caused by a lack of declaration of receipt of Employment Support Allowance (ESA) by the customer or their partner
- The rule uses the Customer and Non-Customer information for PC and Customer information for ESA and is run weekly
- So far in 2013/14 this is another rule generating substantial overpayment at over £150 thousand found in 9 months of the year. It has a moderate hit rates of 64% from the 9 thousand cases referred for investigation
- The logic of the rule basically
  - Checks whether the PC claimant has declared receipt of ESA for all current live claims
  - Matches the PC claimant National Insurance Number (NINo) to the ESA customer data to look for an ongoing award for them and refers those with a discrepancy
  - Performs the same check on the PC partner – whether they've declared ESA receipt and then whether they are no the ESA customer data
  - The output is therefore a mix of potential claimant and partner discrepancies

Example 1: PC customer in receipt of non-declared ESA

PC CUSTOMER (Match A)		ESA CUSTOMER (Match B)	
Name	Raymond Jones	**Name**	Raymond Jones
NINO	AA123456C	**NINO**	AA123456C
Address Line 1	1 Sunny Street	**Address Line 1**	1 Sunny Street
Postcode	AB1 1AB	**Postcode**	AB1 1AB
Ben Fg_85	N	**Claim Status**	1

Example 2: PC partner in receipt of non-declared ESA

PC CUSTOMER (Match A)		ESA CUSTOMER (Match B)	
Name	John Smith	**Name**	Anne Smith
NINO	AA123456C	**NINO**	BB123456C
Address Line 1	2 Sunny Street	**Address Line 1**	2 Sunny Street
Postcode	AB2 2AB	**Postcode**	AB2 2AB
		Claim Status	1
PC PARTNER (Match A)			
Name	Anne Smith		
NINO	BB123456C		
Ben_Fg_85	N		

EXPECTED OUTCOME:

To recalculate the PC award reflecting the ESA in payment, as long as the ESA claim is correct and expected to continue.

Data Matching – Product Examples

- **DWP Service:**

- Over 250 regular Fraud & Error matching rules, mainly looking for inconsistencies between various benefit administration systems
- Bringing in external data and risk scores to enhance detection of F&E e.g. from Credit Reference Agencies
- Winter Fuel/Cold Weather Payment – matches to identify individuals or households eligible for support with fuel costs totalling £3 billion a year
- Integral part of department's long term F&E strategy
- **Service to Other Government Departments:**
- Dental Practice Board Checks: Fortnightly checking of around 40 thousand Dental Treatment applications for qualifying benefit - 15% incorrect
- Digital Switchover: Identification of households eligible for assistance/set top box for Digital Switchover programme – over 0.5 million installations
- Warm Homes Discount: Work with energy suppliers to identify vulnerable customers for extra help with rising fuel bills – up to 900 thousand customers supported

Protocols and Data Matching Issues

- Strict rules governing what data matching can take place and for what purposes
- Generally able to share data for the purposes of detecting fraud but must guard against ‘fishing’
- Data matching agreements
- Key issue is capacity – many demands on limited resource
- Not all demands relate to fraud and error, or even to DWP
- Important to have correct control mechanisms to manage prioritisation

Data Matching – Summary

- **Detect:**
- Matching cross-Government data to identify anomalies
- Case cleansing based on predictive models using past patterns of overpayment to predict future behaviour
- **Prevent:**
- Automated Data Matching on changes of circumstance
- Transactional based risk scoring at new claim stage
- Obtaining and using financial data including earnings records
- Data matching where fraudulent behaviour has been exhibited towards other organisations indicating potential propensity to benefit fraud
- Looking to experiment with improved analytics linking across data sets – social network analysis