

Smarter Energy: Detecting Energy Theft



12 February 2010

Defica 

Detica is the UK's pre-eminent BI and Security consultancy

Key facts

- Operating since 1977
- Over 1,700 people
- Offices in the UK, US and continental Europe
- Stand-alone business within BAE Systems since Sept 2008

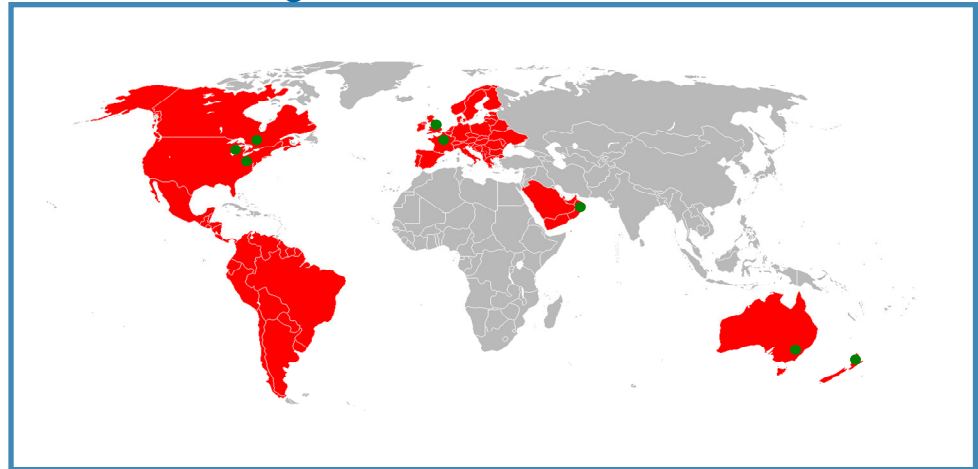
Key markets

- Defence and intelligence
- Central government
- Telecoms and media
- Financial Services
- Energy and Utilities

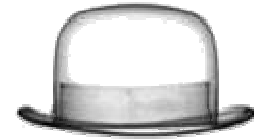
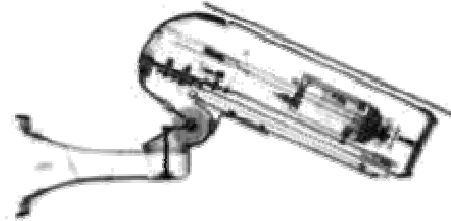
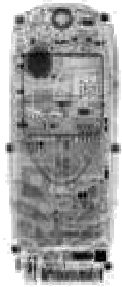
Detica services:

- Deep, specialist knowledge; focus on **data solutions**
- **Business consultancy** and process optimisation specialising in fraud, risk, AML, intelligence, national security and criminality.
- **Technical consultancy** specialising in large complex data analysis.

Global coverage



We serve high profile government and commercial clients



“We trusted Detica to assign the right calibre of people; they understand our business and act fast.

Detica’s professionals are original thinkers who find the most appropriate solution to the challenge, rather than simply applying the solution they think you want.”








Commercial



Government

We solve large scale, complex data challenges

 HM Revenue & Customs	<ul style="list-style-type: none"> • Detecting tax evasion across multiple tax domains (32 data sources) – 12,000 users, billions of records
	<ul style="list-style-type: none"> • Advanced profiles for targeting risk at the border(300M movements per year)
	<ul style="list-style-type: none"> • Global solution to investigate fraud across banking & Insurance • £10m benefit per month across UK and Mexico in banking
	<ul style="list-style-type: none"> • 10x increase in total fraud detected • 10x increase in targeting accuracy (less false positives) • 3x increase in investigator productivity
	<ul style="list-style-type: none"> • Detecting organised crime rings for the UK insurance industry • 98.5% of UK insurance data processed every day • More than 250 arrests in the first 18 months of operation

Organised fraud was a serious issue for the insurance sector

The business challenge

- Fraudulent claims cost the insurance industry tens of millions of pounds per year in payments
- Fraudsters capitalised on lack of data sharing across insurers and spread their crimes across multiple organisations in order to avoid detection ,and exploited poor data quality to frustrate detection
- Constant evolution of fraud methods
- The challenge was to build a system to pool data from multiple organizations in order to combat organized fraud. Which techniques could be deployed and what level of fraud could be detected?

Key statistics:

~300m records processed
18m addresses
32m families
3m businesses
41m vehicles
500m match links generated

Processing time:

Overnight

Hardware

2 CPU Windows server
2.5TB disk space

Detica provides an analytics service for the Insurance Fraud Bureau which delivered a 5-to-1 ROI in the first year

How Detica helped

- Following an initial proof of concept, Detica developed a business case, defined the solution architecture, established a concept of operation and launched the IFB service based on Detica NetReveal®
- Detica used NetReveal® to initially load **6 years of data** from multiple organisations and applied analysis techniques to sample this data over several months
- During initial analysis, Detica **identified more than 30 rings, in excess of 36 incidents** with values ranging from £500 to £10,000 across over 20 institutions
- Detica currently operates the service hosting and accepting feeds from 98% of UK's insurance industry data such as motor claims, personal injury and home claims, **assessing 20 million claims records per month**

Benefits delivered

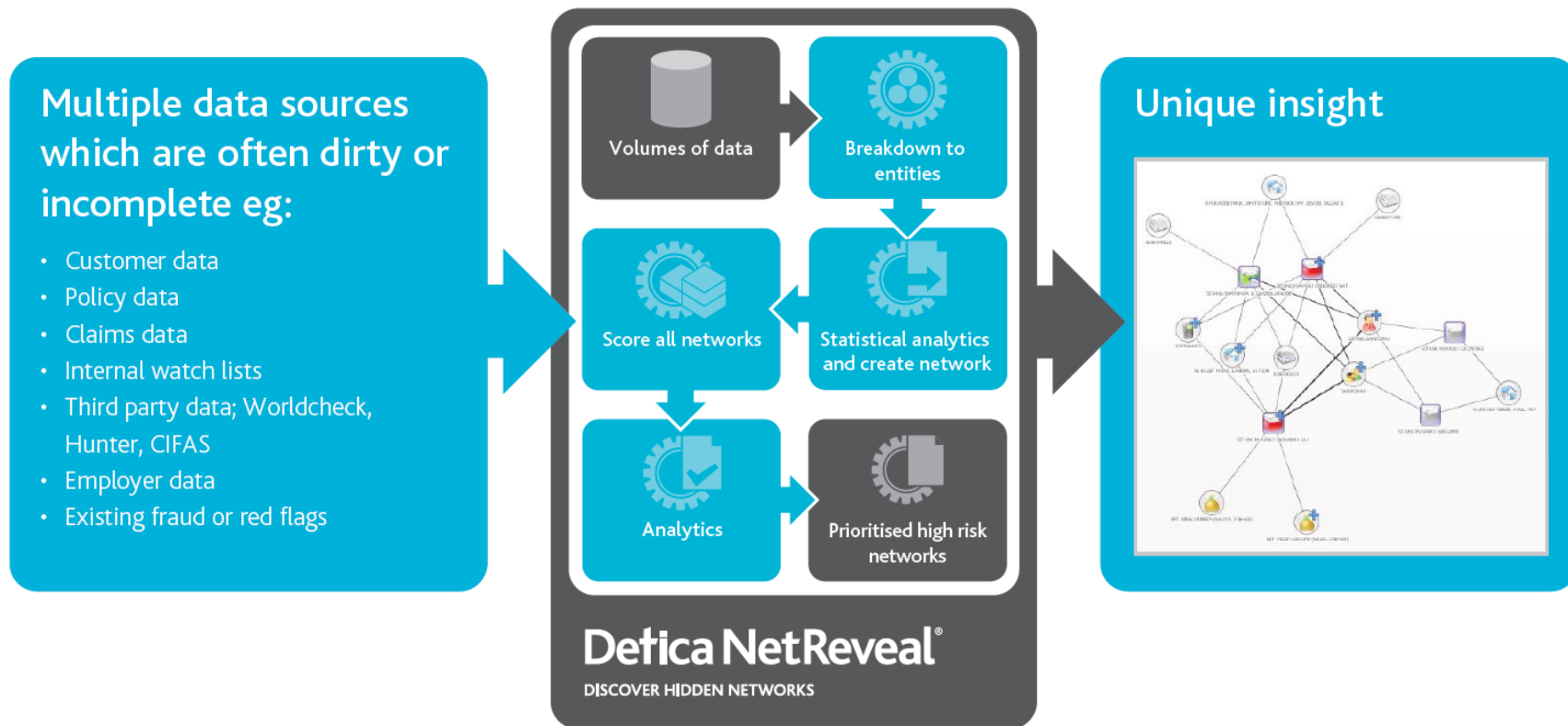
- 98% of UK insurers currently use the system; the **system processes around half a billion records**, generates and rescores millions of networks nightly
- For the first time, the UK insurance industry has an operational capability to prevent as well as detect, disrupt and prosecute serious, organised insurance fraud operations
- Data mining results which Detica provided have **stopped at least £8m in fraud, led to 74 arrests and delivered a 5-to-1 return on investment** in the first year; since inception there have now been hundreds of arrests

“We never expected it to be as powerful as it has turned out... IFB has led to 74 arrests... I have been in the business 17 years, and I cannot remember a year when police made more than 10 arrests for insurance fraud.

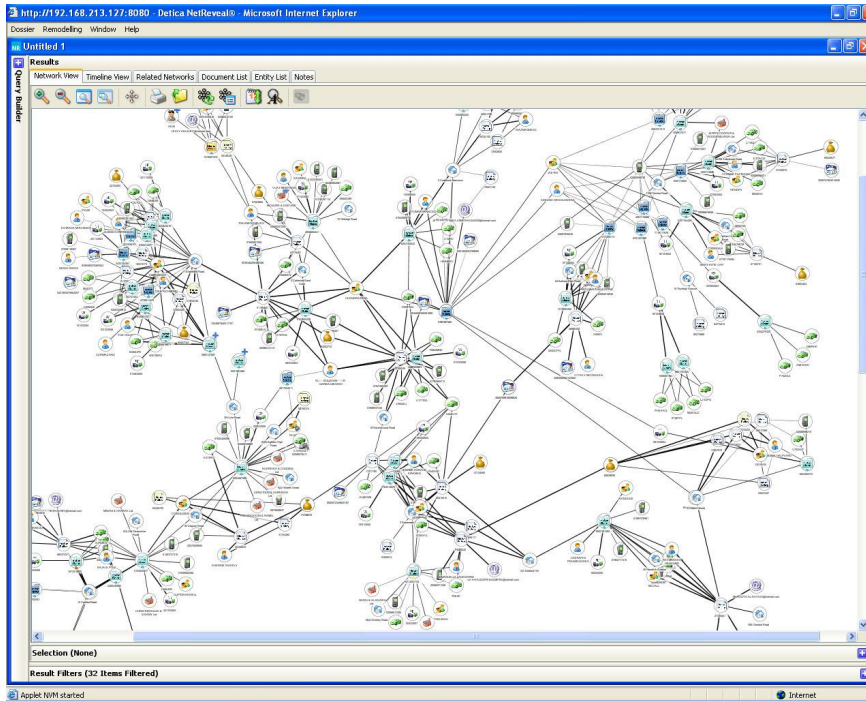
We reckon insurers lose 5% of premium income to fraud so Detica is helping us to reduce that loss”

*Richard Davies,
the IFB's Deputy Chairman*

Our unique software tools are at the heart of this service



Demo



For further details on the NetReveal product, please visit:

<http://www.deticanetreveal.com/>

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