





REVOLUTIONIZING DIGITAL FORENSICS

HOW NUIX EMPOWERS POLICE SCOTLAND WITH CUTTING-EDGE EFFICIENCY AND ACCURACY

SUMMARY



Police Scotland evaluated its digital forensic technologies and processes against a workflow using Nuix solutions in a series of drug supply cases and a multi-agency fraud case. Following a robust six-month proof of concept, Police Scotland found the Nuix workflow:

- > Halved the overall time it took officers to complete a forensic analysis, with digital forensic processing time reduced by 60% and report preparation time reduced by 76%.
- > Increased the average number of cases completed per analyst by 75% and the average number of devices processed per analyst by 80%.
- > Allowed investigators to complete a case in months that would have taken years using the old methods.

FORENSIC PROCESSING TIME **U** 60% AV. NO OF CASES PER ANALYST **75%** REPORT PREPARATION TIME **76**%

01. CHALLENGE

Covering policing across Scotland with over 23,000 officers and staff, across 13 local divisions and national specialist teams. Police Scotland is responsible for major crimes, public protection, organized crime, counter-terrorism, intelligence, and safer communities.

In an effort to enhance the efficacy of their digital forensic investigations, Police Scotland undertook a comprehensive assessment of their existing technologies and procedures. The objective was to compare these legacy systems with a streamlined workflow using Nuix products. This evaluation was conducted on two types of cases that are representative of their typical workload:

- Multiple drug supply cases involving the extraction, evaluation, and cross-referencing of data from a large number of seized mobile devices.
- An investigation into a significant fraud operation that resulted in a haul of over £4 million (US\$5.3 million). The multi-agency investigation involved the seizure of more than 100 electronic devices, primarily mobile devices and computers, yielding approximately 14 million pieces of evidence.

The challenge facing the investigative teams was to process these devices efficiently and analyze the data to secure evidence and establish evidential links between suspects.

02. SOLUTION



Police Scotland conducted a rigorous and robust six-month proof of concept to evaluate Nuix's capabilities in comparison to their existing workflow. The officers involved were highly experienced in current digital forensic methods and well-equipped to identify any benefits or drawbacks of the revised process.

"This type of work would normally be done manually by several members of staff in our department with the digital devices being sent to our digital forensic officers who are not full time in this area," said a Senior Investigator involved in the fraud case. "It would take several months even to allocate followed by months of them loading the devices onto systems before coming back to investigators to then sift through hours of calls and other data. In an investigation this size, it could even take years."



Nuix has the ability to dramatically improve digital forensic capabilities in comparison to existing processes, subsequently reducing backlogs and enhancing service delivery.

Senior Investigator - Police Scotland





03. RESULTS



The proof of concept demonstrated substantial improvements in the speed of forensic analysis and allowed both cases to be completed significantly faster using Nuix software.

"Nuix has the ability to dramatically improve digital forensic capabilities in comparison to existing processes, subsequently reducing backlogs and enhancing service delivery," said the Senior Investigator. "It ensures inquiry officers and the Crown Prosecutor are presented with a comprehensive evidential product-including exculpatory evidence—in an efficient, clear and concise platform."

i. Case completed in months, not years

The Nuix workflow led to a successful conclusion of the fraud investigation over several months, which the investigative team estimated would have taken years to complete using the old methods. Nuix's analytical tools and workflows helped the investigators find the vital pieces of evidence among the 14 million items extracted and establish lines of communication between the key suspects. "Thanks to the use of Nuix, the dataset has been reduced to a level which allows us to pinpoint patterns of activity and direct communications between our Organised Crime Group suspects with further lines of enquiry being identified," said the Senior Investigator. "It has allowed us to uncover substantial electronic evidence supporting our case. This is, without doubt, more robust, more efficient and more cost effective than anything ever used previously and is definitely the way forward."

ii. Forensic analysis speed doubled

Police Scotland observed remarkable improvements when using Nuix for forensic analysis. Officers completed the entire process, including data extraction, processing, and report preparation, in just half the time compared to the old method, representing a significant 51% reduction. Furthermore, digital forensic processing time was reduced by an impressive 60%, while report preparation time showed an outstanding reduction of 76%.

The adoption of Nuix software led to a substantial increase in productivity, with analysts completing an average of 75% more cases per week compared to the previous technology and workflow. The average number of devices processed per analyst per week also increased 80% using Nuix. These results highlight the undeniable effectiveness and efficiency of Nuix in enhancing investigations.

"It's worth noting that a team of just two digital forensic analysts were able to complete the many drugs supply investigations using Nuix software, compared to thirteen who used Police Scotland's existing tools and workflows. This is, without doubt, more robust, more efficient and more cost-effective than anything ever used previously and is definitely the way forward."

REQUIRED ANALYSTS REQUIRED ANALYSTS OVERALL ANALYSIS TIME 2 **51%** OLD WORKFLOW NUIX WORKFLOW

ABOUT POLICE SCOTLAND

Police Scotland's purpose is to improve the safety and wellbeing of people, places and communities in Scotland, focusing on Keeping People Safe in line with our values of Integrity, Fairness and Respect. It is the second largest force in the UK after the Metropolitan Police with a workforce of 23,000 officers and staff working together for the people of Scotland.



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Senior Investigator - Police Scotland







Nuix (<u>www.nuix.com, ASX:NXL</u>) is a leading provider of investigative analytics and intelligence software, that empowers our customers to be a force for good by finding truth in the digital world.

We help customers collect, process and review massive amounts of structured and unstructured data, making it searchable and usable at scale and speed, and with forensic accuracy.

APAC EMEA NORTH AMERICA
Australia: +61 2 8320 9444 UK: +44 203 934 1600 USA: +1 877 470 6849

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