'Ineffective' organization of police digital forensics slowing down investigations: Study

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"Ineffective" methods of risk assessment and the processing of items for digital forensic analysis have led to police tensions and are slowing down investigations, a new study warns.

Ninety percent of all cases in England and Wales carry a digital element. Researchers analyzed how police requests for in-house digital forensic

examinations have been organized in 35 forces in England and Wales between 2012 and 2022.

They found a risk assessment tool used by many forces—the Case Prioritization Matrix—has forced digital forensic practitioners and [police officers](#) to take on additional activities that affect the speed of their work. Those who use it say it is not compatible with the needs of police or other stakeholders in the criminal justice system.

The research also shows how a lack of centralized guidance and monitoring nationally has resulted in considerable uncertainty about how forces in England and Wales should deal with multiple, changing priorities and the surge in requests for digital forensic examination. Lessons are rarely shared between forces, and even within the same constabulary, evaluation of risk assessment processes and foresight are often missing.

The study calls for an updated understanding of risk and prioritization and a better forecasting of internal policing demand, which are needed to address the growing demand for digital forensic analysis and ensure justice to victims.

Since 2012, many of the forces analyzed have used the Case Prioritization Matrix, which was designed by the National Policing Improvement Agency to evaluate cases submitted for analysis. However, a rise in requests for specialist digital forensic examinations and several socio-legal changes in the last decade led to stakeholders questioning its usefulness and seeking alternatives.

The risk assessment tool orders cases using a specific understanding of risk based on the most frequent type of offense. This approach results in offenses whose risk is either not recognized or diminished by the algorithm used, being given less importance.

Not only do officers need to improve the ways in which they submit information to digital forensic units, but also digital forensic mangers spend a considerable amount of time gatekeeping officers' submissions for analysisto adjust the tool's scores and accommodate for legislative changes and other policing priorities.

Of the 35 forces analyzed, 25 relied on this [risk assessment tool](#). Many of these forces were considering, developing, or implementing other instruments for assessing digital forensic-related risk. Most participants in the forces that used the tool criticized its effectiveness and lack of alignment with the needs of officers, the Crown Prosecution Service, or Child Protection Services.

Participants argued that its scoring mechanism and categories did not reflect the increase in the demand for digital forensic examination related to other crime types and made new types of offenses difficult to risk assess because it left 'too much open to interpretation'.

Digital forensic gatekeepers often described the scenarios covered by the tool as 'too narrow', as it does not include offenses such as harassment, stalking and suicide, or accounts for new categories, such as up-skirting. Developments and legislative changes since the tool was adopted in 2012, such as bail conditions, hearing dates, the impact on victims, and Crown Prosecution Service pressures to undertake rapid digital forensic analysis needed for remand, were reportedly difficult to incorporate into its use.

The study by Dana Wilson-Kovacs and Jen Wilcox from the University of Exeter, is published in the journal *Policing: A Journal of Policy and Practice*.

Professor Wilson-Kovacs said, "Rather than being a dispassionate and objective decision-making tool, the Matrix requires human input,

interpretation, and discretion. This creates blurred lines of ownership and accountability, a fragmented operational understanding of what digital forensics can achieve, what information is needed to process submissions, and the difficulty of justifying Matrix-driven decisions to policing stakeholders. This leads to tensions between digital forensic units and operational units and demonstrate the need for more systematic approaches to how this type of internal demand is managed."

The study is part of a project on the development and application of digital forensics in policing in England and Wales. Researchers carried out 270 hours of ethnographic observations at four DFUs affiliated to four police forces in England, 67 semi-structured interviews with stakeholders from these constabularies, including 12 digital forensics and senior forensic managers, an additional 14 with digital forensic managers from other forces, and numerous informal discussions with digital forensic practitioners, forensic and police managers and various other government and police stakeholders.

Provided by University of Exeter