

EEMA High-Level Fireside Summary: Criminal Chain of Custody

- Can new technology secure evidence?

Criminal Chain of Custody - Can new technology secure evidence? Addressing Technological Disruption in the Workplace. This was the topic for EEMA's first Virtual High Level Fireside Briefing, which took place on 24th March.

More than 100 attendees representing 24 countries participated in the hour-long debate, that was Chaired by EEMA's Jon Shamah. He was joined by James Rapinac, Director of Communications at Gallup, Vijay Rathour, Partner leading the Digital Forensics and Investigations Group at Grant Thornton, and Paul Kennedy, a Strategic Law Enforcement and Security Presenter.

Jon Shamah opened the briefing with an introduction to [LOCARD](#), a project funded through the European Commission's Horizon 2020 program, that is working towards providing an holistic, trusted and distributed platform for chain of custody assurance along the forensics workflow, allowing the storage of digital evidence metadata in a blockchain. The use of blockchain technology was explained further by Vijay Rathour, who provided an introduction to the technology and its heritage in the world of distributed computing.

Vijay highlighted examples where this robust technology, for storing data in an encrypted and anonymised way, that is extremely resistant to being tampered with, is already being used to provide a strong chain of custody. These include online land registries, the ownership of diamonds, and the traceability of food from field to fork, as well as its use in crypto-currencies such as Bitcoin.

He also highlighted how the technology is being used for criminal purposes (particularly the flow of money/crypto-currency) and how the world of digital forensics needs to evolve. "We need to be thinking more about the flow of data and the flow of digital evidence, almost like tributaries of water," explained Vijay. He stressed that digital forensics experts need to be confident that the evidence identified from the chains of custody are critically correct.

The need to evolve investigations was continued by Paul Kennedy (a former Chief Police Officer) who talked about the explosion in the volume and variety of digital evidence in law enforcement, driven in part by the prevalence of smart devices in society. He explained how: "Almost all police investigations involve three groups of people – victims, witnesses and suspects – and each of those three categories, in any investigation, has a number of devices which carry digital evidence." However, Paul also observed that it is not only smart devices, highlighting the increasing use of surveillance camera

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footage, automatic number plate recognition, officers body worn video and voice recordings from the control room. He highlighted that a big problem for investigators is how digital evidence is being held in silos. “For an undetected murder I would have an average of 50 detectives working on the case, and about 20% would be committed to trawling CCTV and other types of digital evidence.” Paul added how this was an inefficient use of time and resource, before sharing a case study of how Merseyside Police (the sixth largest force in the UK) is tackling the challenge using currently available digital evidence management technology.

The overarching theme across all speaker presentations was the immediate need for change and crucially digital transformation in order to have the infrastructure, technology and skills available to rise to the challenges. James Rapinac provided a perspective from employees across Europe, sharing data from research conducted by Gallup in 2019 in which 39% of respondents agreed with the statement that their company needs to implement digital technologies to improve performance, whilst 33% believed their company to be ready to do so.

EEMA would like to thank all the speakers and attendees and you can keep up-to-date with all upcoming virtual and physical EEMA events on the website: www.eema.org.

EEMA has made a recording of briefing available free-of-charge at: www.eema.org/event/eema-fireside-briefing-24-march

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