

Exploring new capabilities

Motorola Solutions' senior vice president of AI and incident management, Jehan Wickramasuriya, discusses current challenges and solutions for UK emergency services organisations



Could you describe your role within Motorola Solutions, particularly regarding the direction and strategy of the company?

My team works on all the core AI capabilities across our portfolio, which includes products that span both public safety and enterprise security.

These capabilities are roughly divided into 'edge' AI – so analytics that run on our cameras, appliances and sensors – as well as cloud software. That includes control rooms, computer-aided dispatch software, records and investigative tools, enterprise incident management and more.

From a specific product perspective, I'm responsible for our ANPR business worldwide, as well as our incident management and resilience platform.

You mentioned your team. Could you go into a bit more detail about what they do?

My core AI team is essentially a group of research scientists and machine learning engineers who work across our portfolio, roughly organised around AI research and our AI platforms.

They're less product-aligned and more outcome-driven across several verticals, with those outcomes mapped to different products. They work on specific domain problems like computer vision, as well as audio and language, which have resulted in capabilities like video analytics and emergency call transcription/translation, or language capabilities.

We have internal standards for how we think about designing AI tools to perform in mission-critical contexts. We build our AI technologies to be reliable, understandable and secure, and to support humans in doing what they already do best, but faster and with greater accuracy. Before we introduce a new product or capability, a lot of work goes on behind the scenes to design and develop it responsibly.

With that in mind, what are the key current use-cases for emergency services organisations?

If we take a look at mission-critical workflows, there is what we call 'mid-incident' – what takes place in the moment to respond to the emergency at hand – and then there's 'post-incident', or forensic and investigative capabilities with a feedback loop that moves us closer to 'pre-incident' planning and preparedness.

A lot of our investment and focus within emergency management has been around improving the efficiency of mid-incident, real-time workflows, in order to help speed an emergency response. We think about that in three different categories – automation, acceleration and assistance, which

you can map almost directly with what is happening today with generative AI.

Automation could be helping our cameras see better, something we call descriptive AI, or using AI to resolve non-emergency calls so that a call-handler can focus their time on truly pressing situations.

Acceleration is when AI can help better connect humans to the information they need by surfacing the right intelligence across the workflow. So, AI helps humans perform their typical duties faster.

Emergency call transcription is an example of this, the capabilities of which have increased many times in recent years. It can provide a real benefit to call-handlers. For instance, if the caller is in a particularly noisy environment, a real-time transcription of the call can help to ensure details aren't missed. The analysis we're doing on the transcript helps the call-handler to focus on the most relevant information during the call.

Finally, the assistance part is the way in which we build AI into control room workflows themselves. We aim to enable our customers, who are often experts doing the same processes for years, to do those things more efficiently with more confidence, and with access to more data.

Because Motorola Solutions touches so many parts of the workflow, we don't just look at one data source. Rather, we bring together data across multiple public safety systems to enhance decision-making.

The control room, and call handling in particular, seem to be a very important part of the conversation at the moment...

Control rooms are a big priority. They're where calls for help start and they kick off the rest of the public safety workflow.

Where we feel we can make the biggest difference right now is in that mid-incident workflow. If we can continue to show public safety agencies all the ways that AI can support them there, it will lead to better outcomes, helping responders show up on the scene quicker and more informed.

Our standard for releasing these capabilities is high, particularly because of what people expect from us. They're using these AI-enabled technologies in mission-critical contexts, and it needs to perform to that standard.

We're encouraging our customers to try our AI-enabled tools and understand and evaluate their utility. AI can play a big role in improving an emergency response – both in speed, and through surfacing the right intelligence. That's something so many public safety agencies are looking to achieve right now. 