



'PROBabLE Futures'

Probabilistic AI Systems
in Law Enforcement Futures



PROBABLE
Futures

Probabilistic AI Systems in
Law Enforcement Futures



Welcome to

AI for intelligence, investigations and public protection

Monday 20th January 2025



Thank you for joining us today



**This event has an invited audience
comprised of professionals primarily in:**

- Law Enforcement
- Government
- Academic Sector
- Commercial Sector

The Agenda

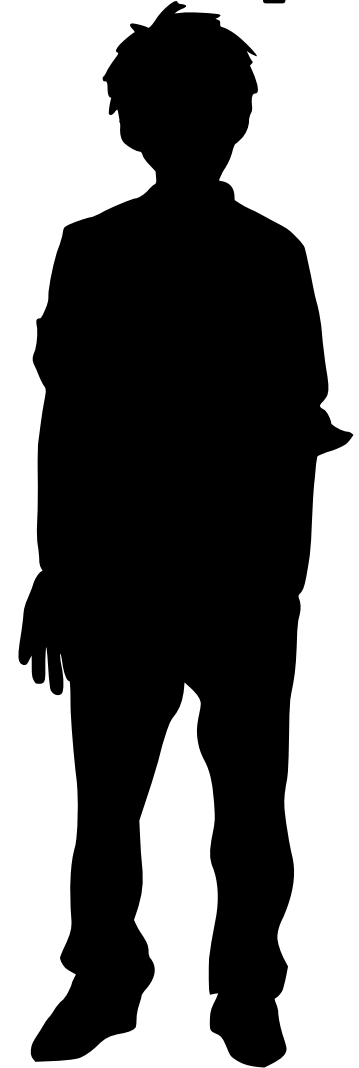


AI for intelligence, investigations and public protection

12.00 – 12.05	Welcome and Event Aims	PROBable Futures Academic Leads Prof Marion Oswald Dr Carole McCartney Dr Claire Paterson-Young
12.05 – 12.20	Introduction to PROBable Futures and Project Vision	
12.20 – 12.40	AI for 101 Calls Case-study 1	Matt Welsted Assistant Chief Constable, West Midlands Police
12.40 – 13.00	Leveraging AI in Digital Forensics Case-study 2	Garry Pilkington Digital Forensic Investigation Unit, Greater Manchester Police
13.00 – 13.10	Break	
13.10 – 13.35	Chaining AI Systems	Prof Muffy Calder Head of the College of Science & Engineering at the University of Glasgow
13.35 – 14.00	Speaker Q&A Discussion of chaining implications and connections	Q&A Chat Feature to be enabled for online delegates to submit and upvote questions
14.00 – 14.35	Industry Panel Comments on the implications for commercial products designed for policing	ROKE: Mark West, Assistant Director for Innovation Microsoft: Ian O’Gara, Data & AI Lead, Public Safety PA Consulting: Phininder Balaghan, AI Consultant Palantir: Robert Shearme, Technical Lead for UK Policing BAE Systems Digital Intelligence: Professor Henry Tse, Head of Products and Services
14.35 – 14.45	Final Remarks and Close	

- Recording is enabled for PROBable Futures researcher reference, but this event will not be published externally
- That Q&A Chat Feature will be disabled during the presentations and opened during the Speaker Q&A session
- All discussion will be conducted in accordance with the Chatham House rule

What Inspired our Project?

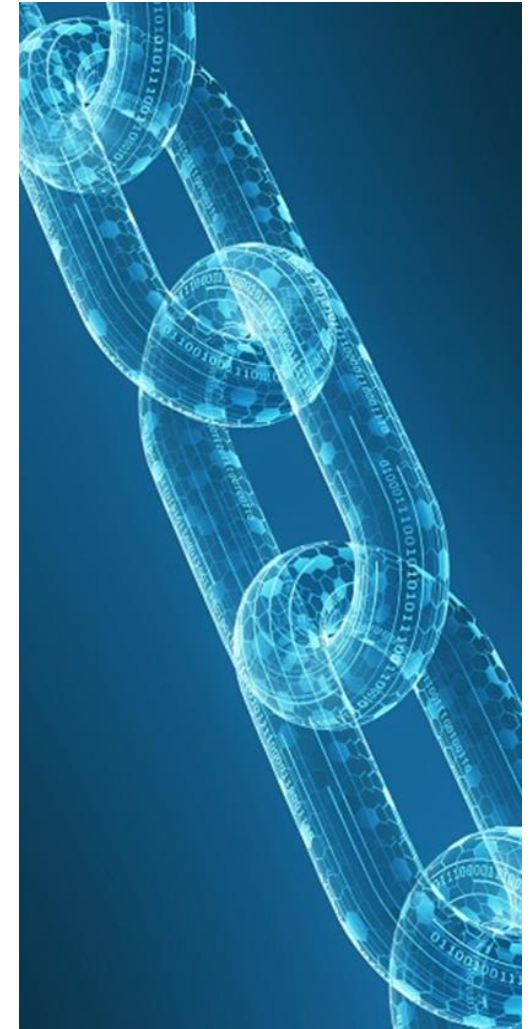


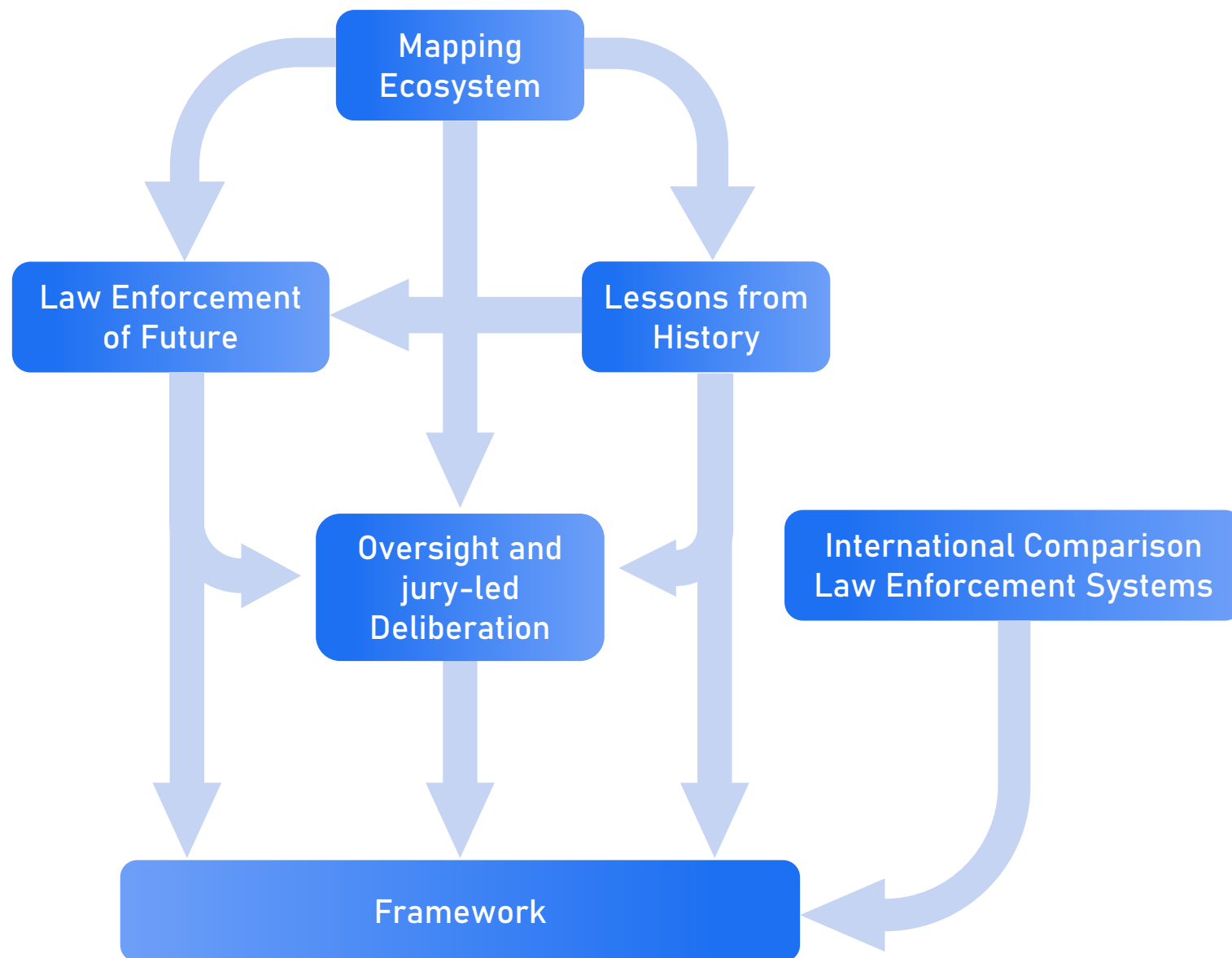
- The **Chaining of Systems**
- The **Pipeline of Uncertainty** and cumulative effects
- **'Jamal'**
- Our ambition is for deployment of Probabilistic AI within law enforcement to aim to achieve **One Coherent System**, with **Justice and Responsibility** at its heart.

'Chaining' effects?



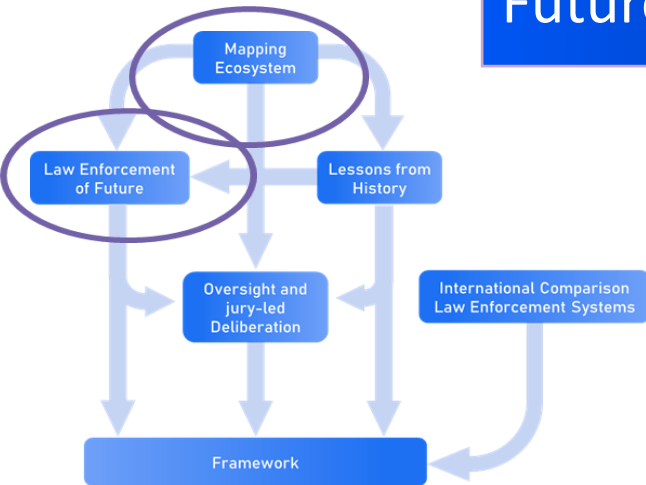
- Probabilistic systems supported by AI being introduced at pace. While potential benefits, decision-making based on 'Probabilistic AI' has serious implications for individuals.
- Key problem for RAI is that the uncertain or probable nature of outputs is often obscured or misinterpreted, and the underlying data is sensitive and of varying quality.
- If AI systems are to be used responsibly, attention must also be paid to the **chaining of systems** and **cumulative effects** of AI systems feeding each other.





Landscape

Tools deployed
In development
Future plans



Case Studies

LLMs & transcription
Image recognition
Predictive analytics

Checklist



Technical Validity
Operational
Deployment
Legality &
Proportionality



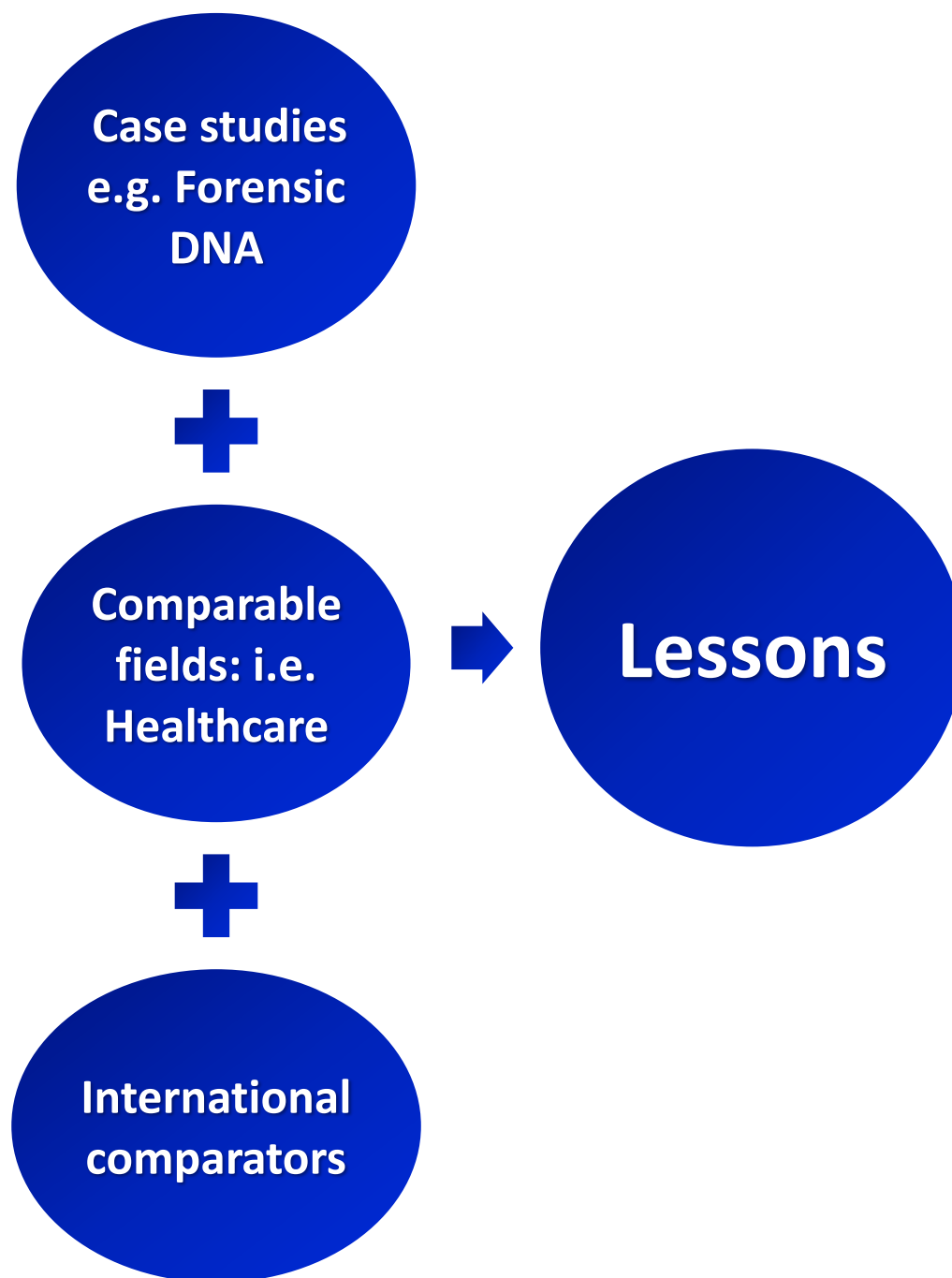
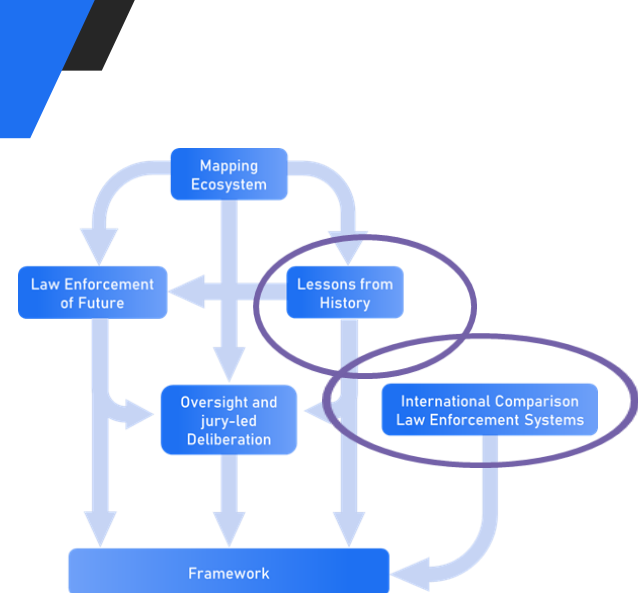
NPCC AI Covenant &
Data Analytics
Guidance



CETaS Report



BRAID
Research with WMP



Lessons Learned - Storytelling

Storytelling methodology will be used to obtain nuanced information, lived experiences and interventions that might otherwise have remained hidden via more traditional qualitative and quantitative research methods. It promotes:



Engagement and Accessibility:

Simplifies complex research, making it more relatable and engaging for a wider audience, including non-experts.



Connection: Through storytelling, research is framed within real-world contexts, allowing audiences to understand its relevance and connect emotionally with the findings.



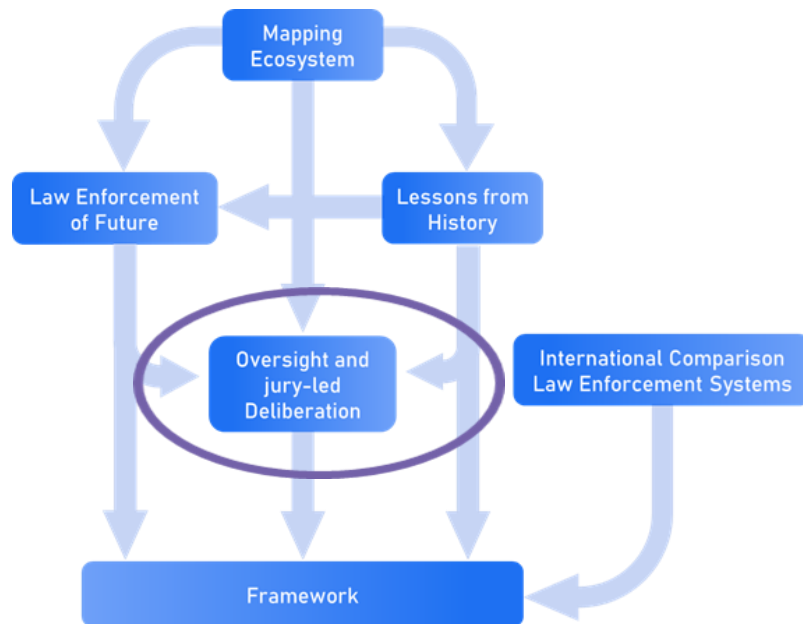
Simplification of Complex Ideas:

Rather than overwhelming audiences with technical jargon, storytelling distils intricate concepts and data into clear, understandable narratives, enhancing comprehension and retention.



Enhanced Impact: The narrative approach makes research more memorable and impactful, helping to communicate key insights and recommendations in a way that resonates with diverse stakeholders, from academics to the general public.

Oversight (Participatory)



- 1 **TRANSPARENCY AND ACCOUNTABILITY**
- 2 **INCLUSIVITY & DIVERSITY**
- 3 **PROPORTIONALITY**
- 4 **CONTINUOUS EVALUATION & ADAPTABILITY**



Implementing RRI: process dimensions



Diversity and Inclusion
promotes **early involvement** of a wide range of actors and publics in R&I practice, deliberation, and decision-making **to yield more useful and higher quality knowledge..**



Anticipation and Reflection
means to **envision impacts** and **reflect on the underlying assumptions**, values, and purposes **to better understand how R&I shapes the future.** This produces valuable insights and increases our capacity to act on what we know.



Openness and Transparency
means **to communicate** in a balanced, meaningful way methods, results, conclusions, and implications **to enable public scrutiny and dialogue.** This benefits the visibility and understanding of R&I.



Responsiveness and Adaptive Change refers to ability to **modify modes of thought and behaviour**, overarching structures, **in response to changing circumstances**, knowledge, and perspectives. This aligns action with the needs expressed by stakeholders and publics.

Basis for research over lifetime of PROBabLE Futures



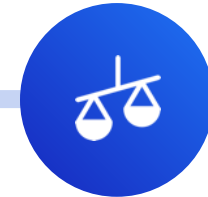
Evolving
Guidelines/
Framework



Evolving
Technology



Adherence to &
Effectiveness
of Guidelines



International
Comparisons



THANK YOU!



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