The implications of AI on legal regulators and how they can use it

DAY 2 – October 5th

15:30-16.45 hrs

SLIDO POLL QUESTION –
What is the nature of your interest in Artificial Intelligence?

1. I'm mainly interested in how AI will affect the people I regulate

2. I'm mainly interested in how AI will affect the industry overall and the scope for new entrants/services

3. I'm interested in how it could be used in regulation

4. I have no idea

OBJECTIVES OF THIS SESSION

1. Understand what artificial intelligence is (and isn't)
2. Understand how it is being used in the legal sector now and likely near term use cases
3. Recognise the potential risks of AI, consumer benefits and protection issues
4. See an example of how a legal regulator is using AI
5. Find out how you can start your AI journey

PANELISTS

Bridget Gramme
Administrative Director
Centre for Public Interest Law

Crispin Passmore
Executive Director
Solicitors Regulation Authority

Alison Hook (moderator)
Director
Hook Tangaza

Steve Wilson
Partner
Standpoint Decision Support Ltd

WHAT IS ARTIFICIAL INTELLIGENCE? ... AND WHAT IT ISN'T

Steve Wilson – Standpoint Decision Support

WHAT AI IS – AND ISN'T

- **The hype:** the capability of a machine to imitate intelligent human behaviour
- **The reality:** statistical techniques to find patterns in data
- **The promise:** reliable models that adapt as more data are collected
- **The limitation:** inability to identify cause and effect
- **The fear:** emergent, general super-intelligence

CURRENT AND EMERGING USES OF AI IN THE LEGAL INDUSTRY

- Image analysis
- Semantic text analysis
- Risk analysis
- Predicting legal outcomes

WHAT ARE THE POTENTIAL RISKS TO BE MANAGED?

Bridget Gramme
Center for Public Interest Law
University of San Diego School of Law

QUESTION

How can regulators guard against AI amplifying structural discrimination?

POTENTIAL CONSUMER BENEFITS AND RISKS

Major Themes

- Access
- Competence
- Bias

Story

POTENTIAL CONSUMER BENEFITS AND RISKS

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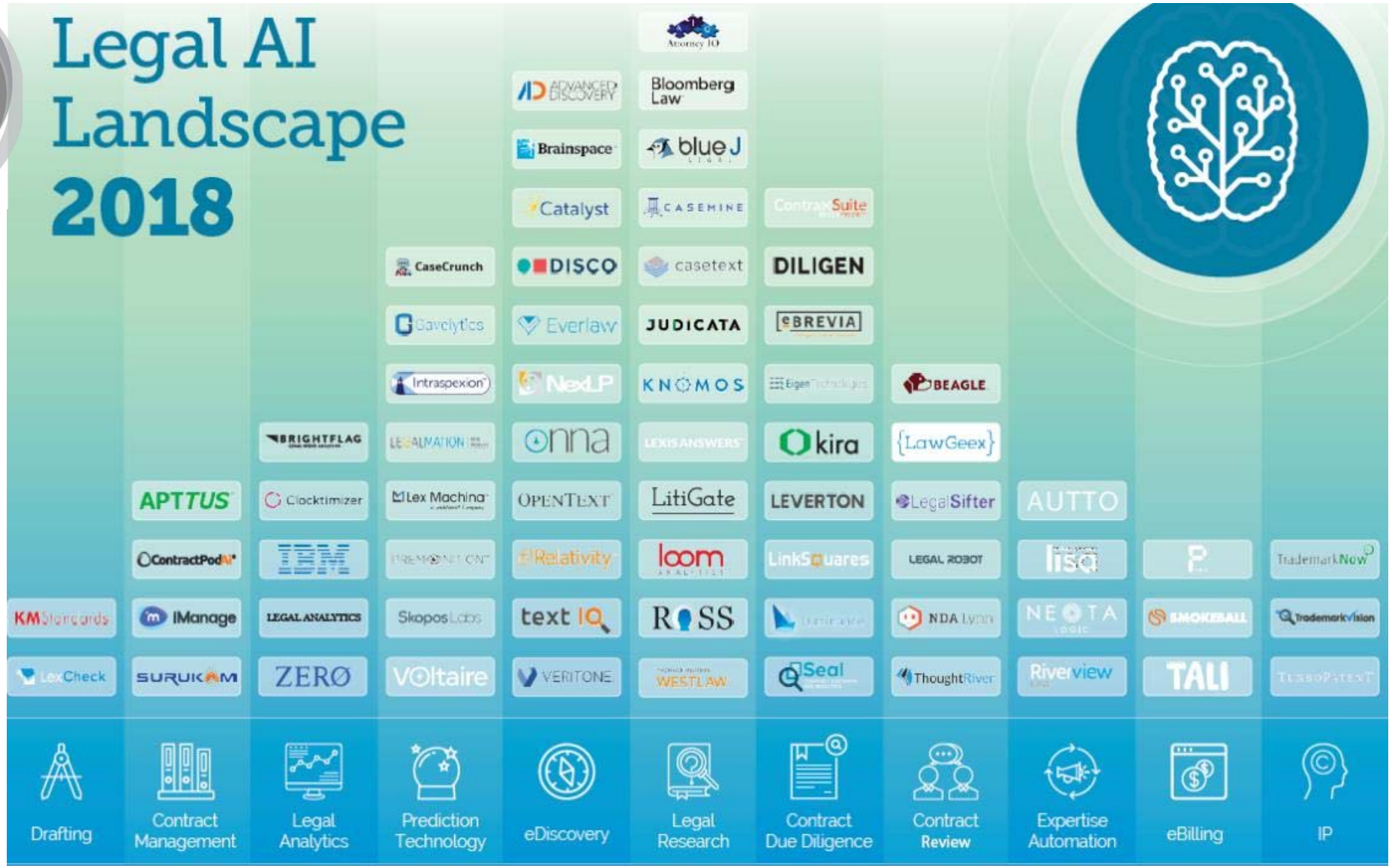

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POTENTIAL CONSUMER BENEFITS AND RISKS

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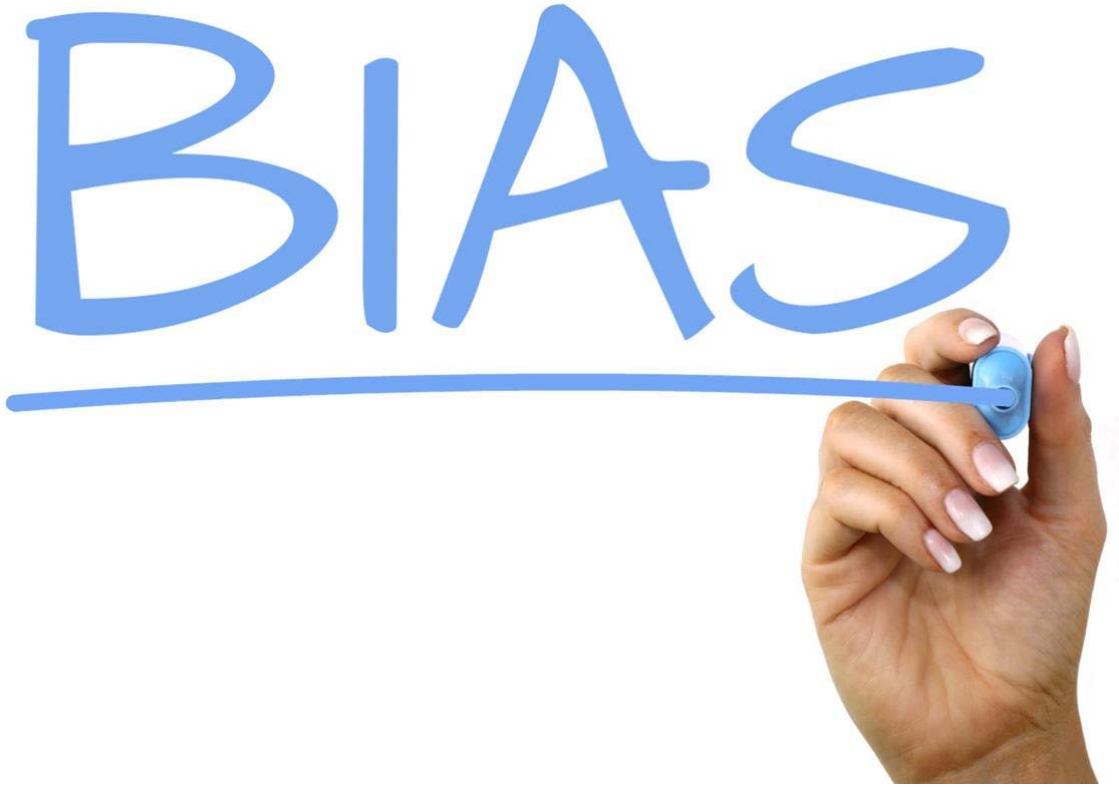
POTENTIAL CONSUMER BENEFITS AND RISKS



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POTENTIAL CONSUMER BENEFITS AND RISKS

HOW LEGAL REGULATORS CAN USE AI

Crispin Passmore - Solicitors Regulation Authority

QUESTION

What benefits does AI offer in comparison to existing tools - given costs involved and lack of research into effectiveness and accuracy of AI?

Who we are

Solicitors Regulation Authority

Across England and Wales we regulate:

185,000 solicitors

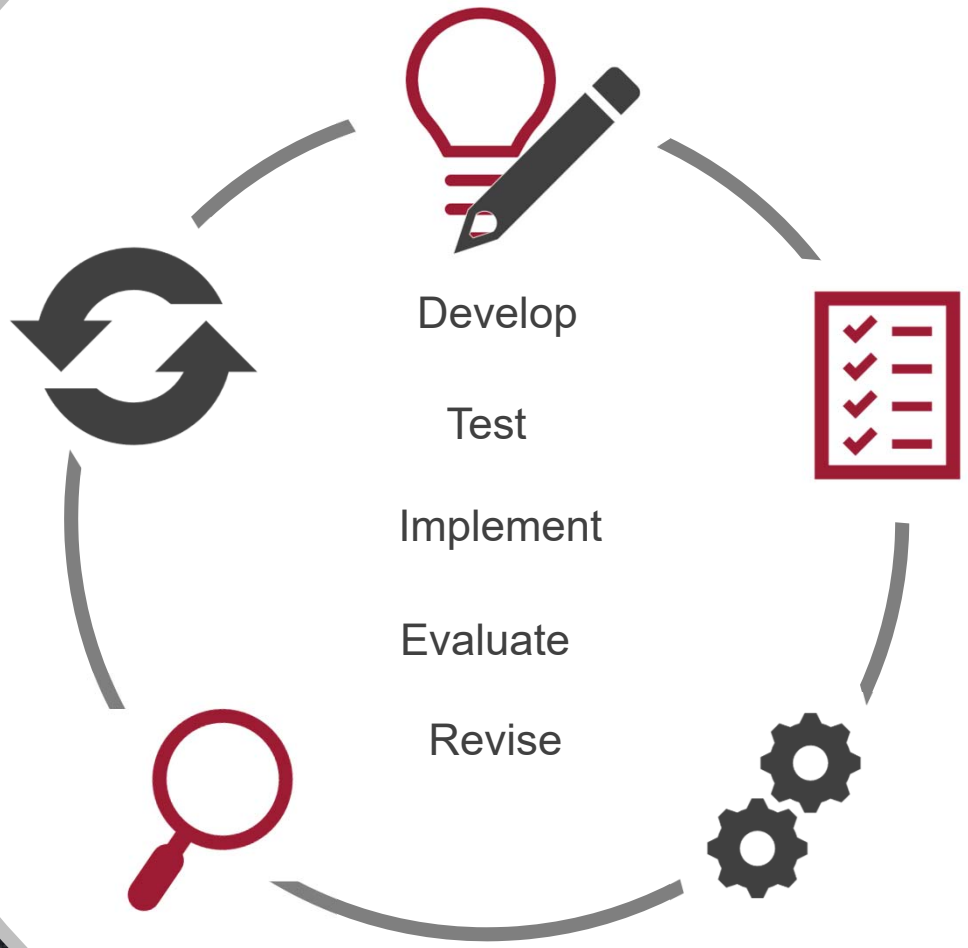
10,500 firms

ABS **750**

We protect the public by:

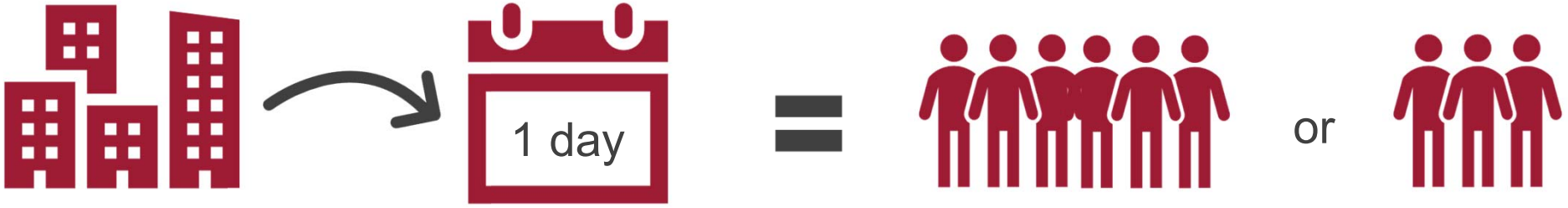
- Ensuring solicitors meet high standards through education and training
- Taking action when things go wrong with a solicitor or firm
- Making legal services more accessible and affordable
- Paying compensation to people who have lost money

How we use AI



Using AI to target our resources

Solicitors Regulation Authority



10,500 firms

Visit

Annual visits

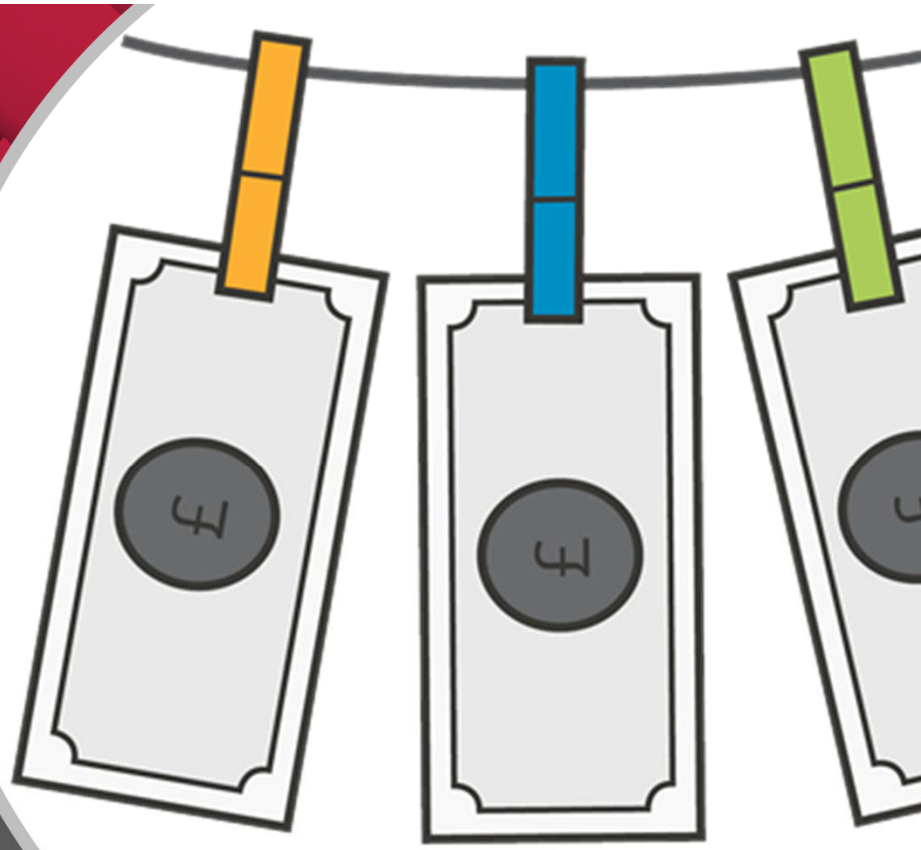
Biannual visits

AML : How we use AI

Solicitors Regulation Authority

AML: Quantitative Risk Profiling

- To group firms whose money laundering and terrorist financing risks are similar
- To identify issues associated with an increased money laundering (ML) risk
- To apply robust data modelling techniques to profile all firms at high, medium or low money laundering risk.

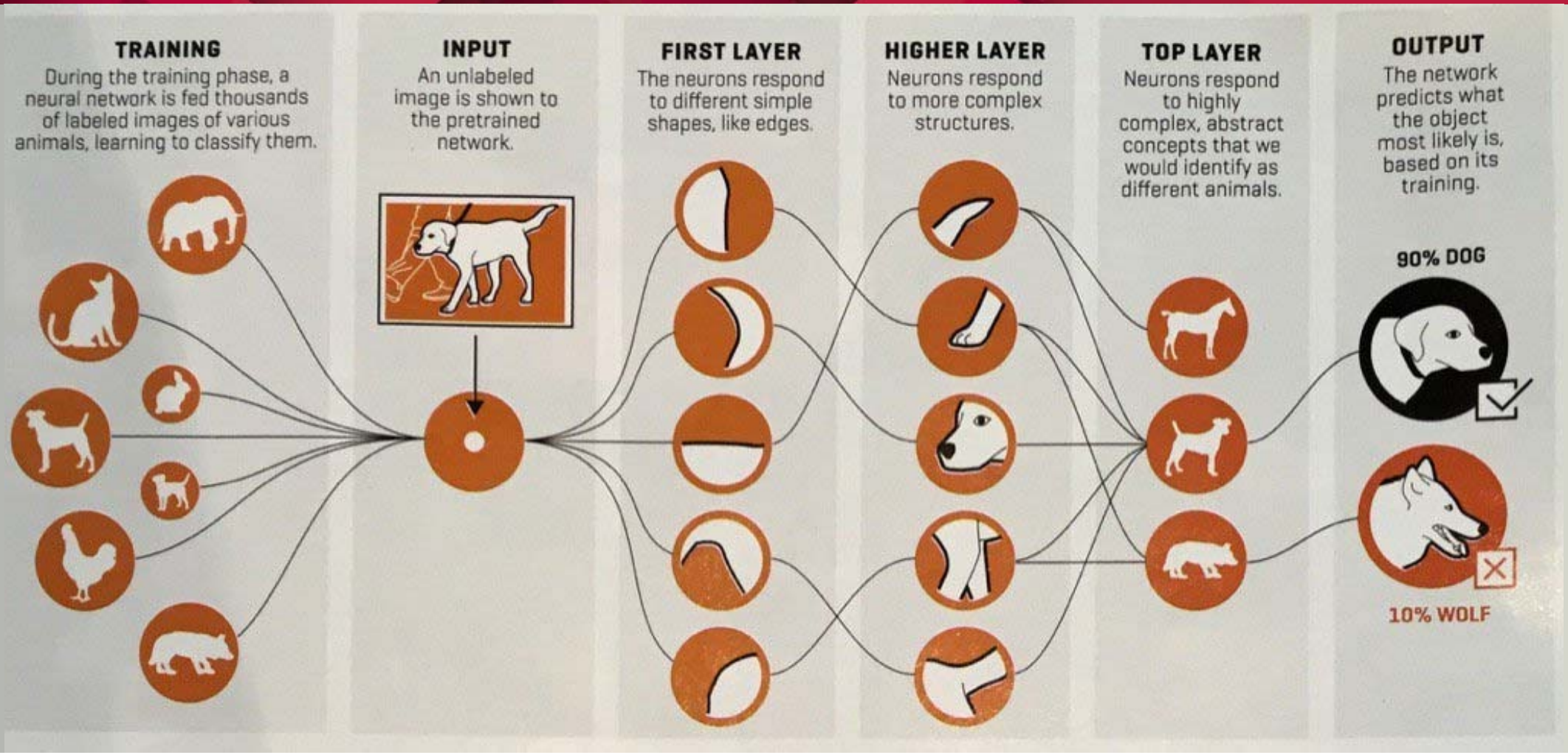


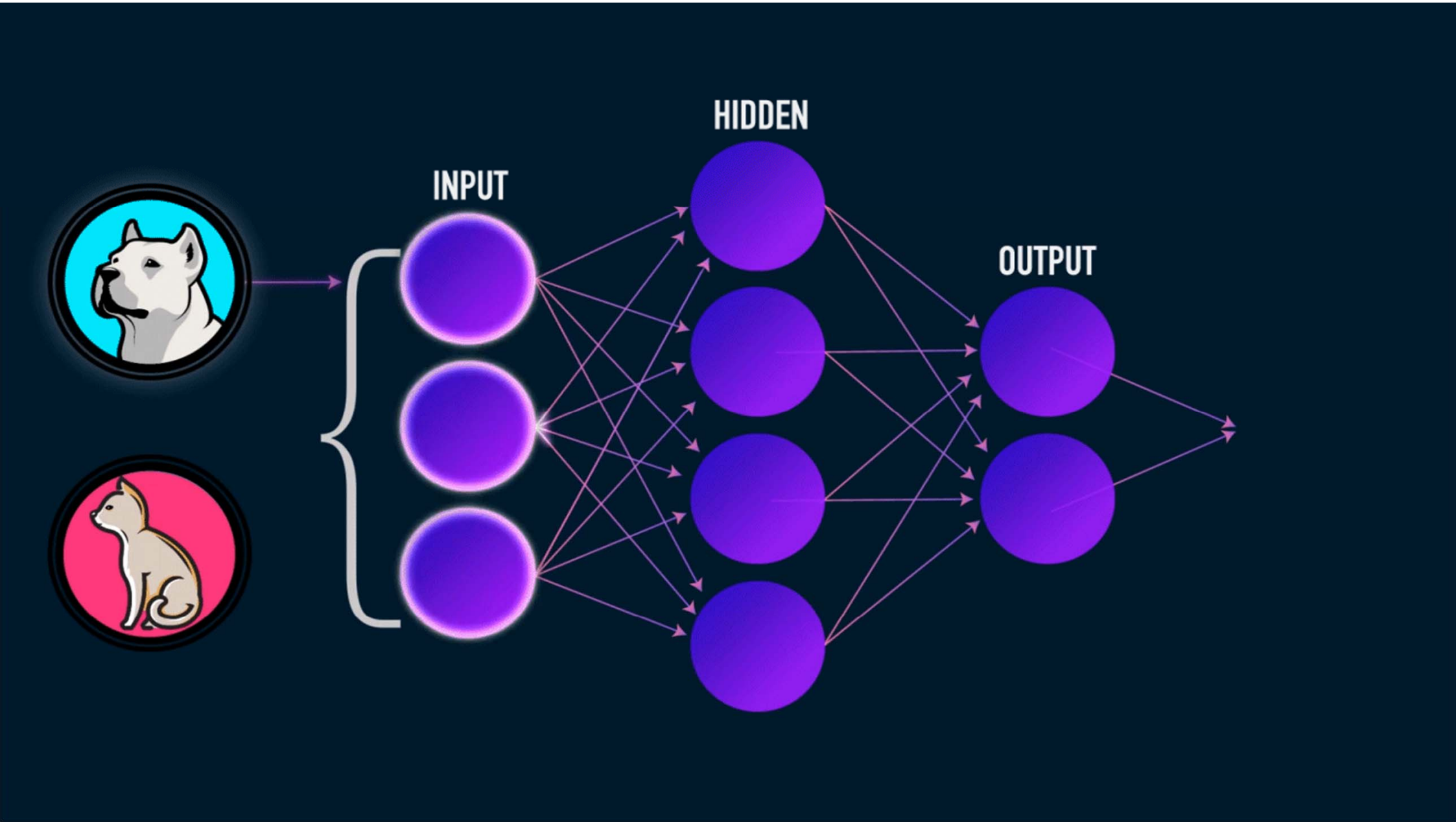
Cats v croissants

Solicitors Regulation Authority

How a neural network recognises a dog

Solicitors Regulation Authority




INPUT
HIDDEN
OUTPUT

Neural network model at SRA to profile firms at risk of money laundering

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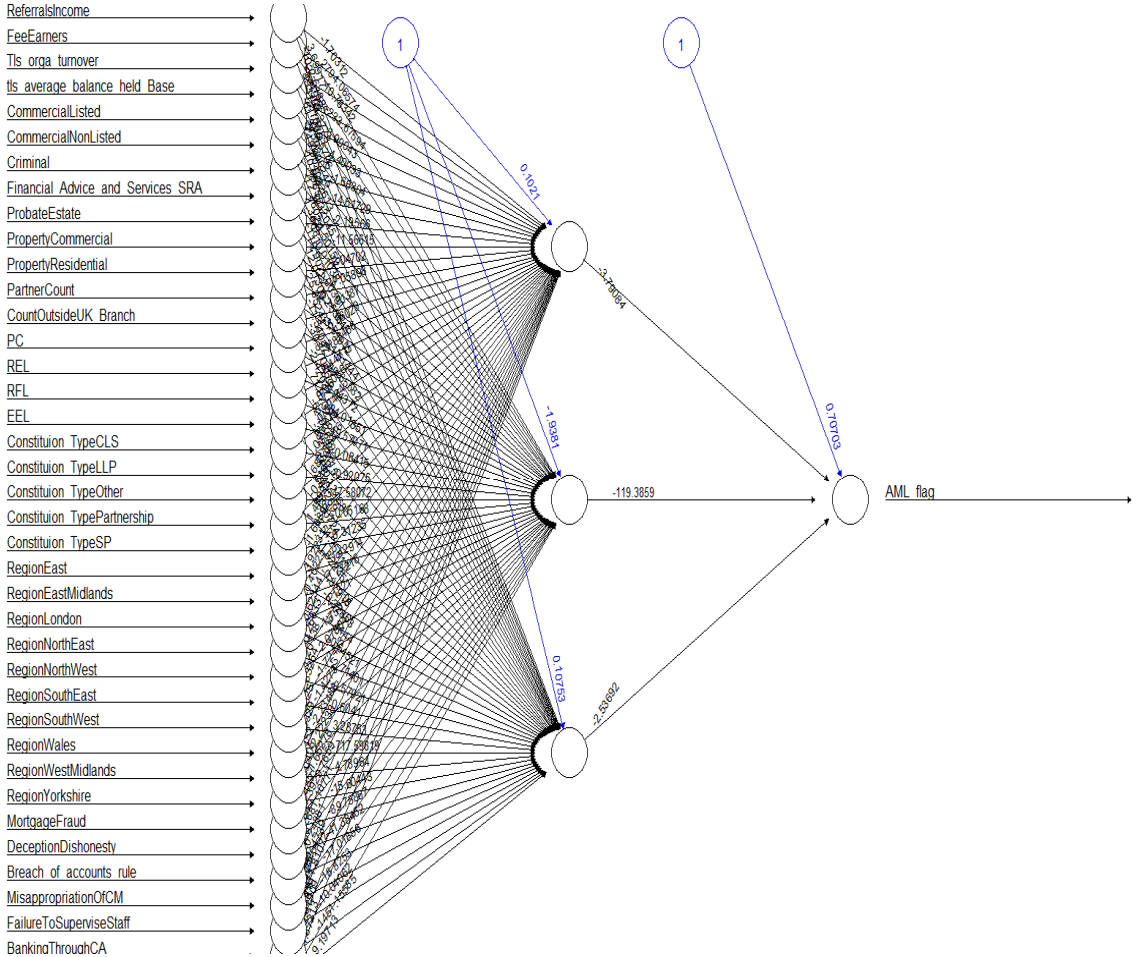

Output: an AML flag for each firm

- The model predicted X firms are at risk of a ML report. We rate these firms as RED in the risk profile
- Y firms were rated GREEN
- Z firms were rated as AMBER
- Final decision made based on combination of this model and human judgment

AI and our decision making

Solicitors Regulation Authority

Firm is profiled

Engagement with firm through our regulatory process.

Investigation, if needed

Complaint received

Investigation

Neural network model helps us with our proactive engagement but it does not impact on our decision making process.

Next steps

Solicitors Regulation Authority

GETTING INTO AI

Alison Hook – Hook Tangaza

WHAT CAN REGULATORS DO?

1. Facilitate Innovation

Lessons from Fintech – The Regulatory Sandbox

i) enabling and encouraging innovation
ii) improving the regulatory framework
iii) improving licensing procedures (relevant for entity reg)
iv) informing policymaking
v) engaging with new entrants

Over 20 sandboxes worldwide

International guidelines - Basel Committee on Banking (2017)

WHAT CAN REGULATORS DO?

2. Drive Sector Innovation

- Lessons from Insurtech – The innovation hub (Lloyds) - Proactive search for new models and talent

3. Harness AI to improve regulation

- Use Regtech to assist compliance

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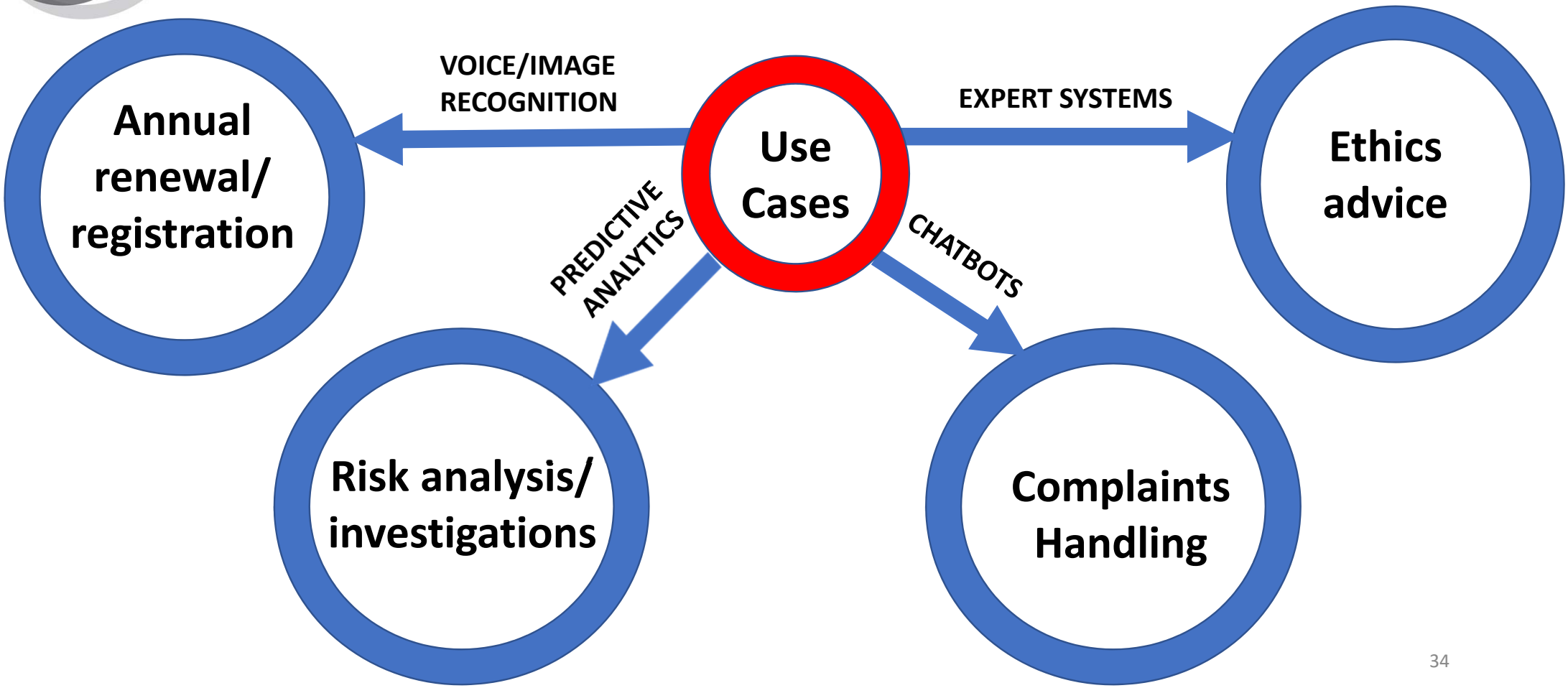
HOW CAN LEGAL REGULATORS USE DIFFERENT FORMS OF AI?



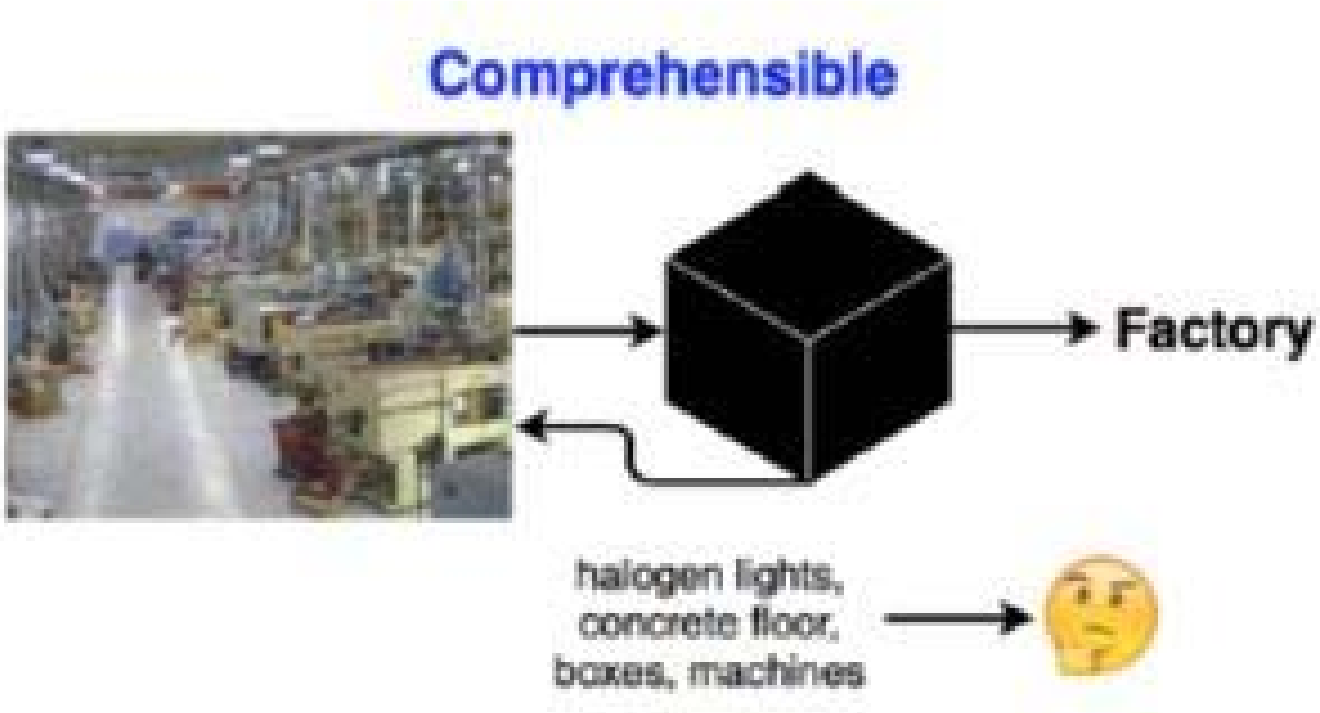
QUESTIONS

What about transparency and AI? In particular “black box risks”.

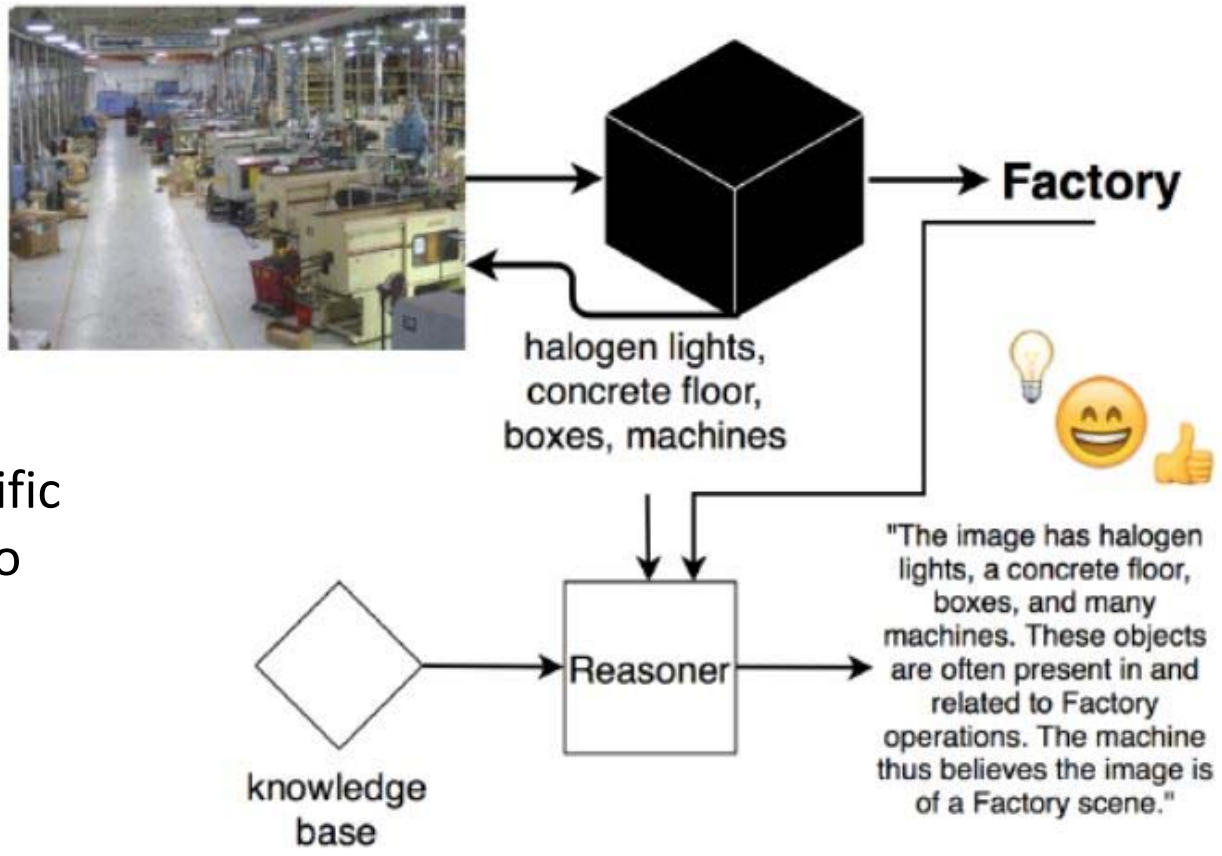
How to ensure AI is not vulnerable to deliberate adversarial attacks?

BLACK BOX RISKS

Understanding how your model has arrived at an answer



AUGMENTED BLACK BOX



Uses subject specific knowledge base to encode reasoning into judgments made

ADVERSARIAL ATTACKS

E.g Deliberate false information to mislead the neural network (image recognition)

NB. Use case

<u>Defence Techniques</u>

i) Adversarial training – explicitly train the model on possible ‘adversarial examples’

ii) Model outputs probabilities not hard decisions

CONCLUSIONS

- Don’t sweat the complex stuff
- Lots of near term tried and tested AI applications that can be useful
- Start thinking about structuring data and using entry level technologies (e.g. RPA + AI)

SLIDO POLL QUESTION –
How can ICLR help you with AI?

1. I'd like to have access to materials on how AI is being used in the legal sector

2. I'd like to hear more about how other regulators, and legal regulators in particular, are using AI

3. I'd be interested in webinars or further conference programming on this topic