

# The March of the Machines – Legal and Ethical Issues

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Arm

AI and law – for the people, by the people?



# What many talk about: AI and biased decision making

<b>VERNON PRATER</b> Prior Offenses 2 armed robberies, 1 attempted armed robbery Subsequent Offenses 1 grand theft <b>LOW RISK 3</b>	<b>BRISHA BORDEN</b> Prior Offenses 4 juvenile misdemeanors Subsequent Offenses None <b>HIGH RISK 8</b>
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<b>DYLAN FUGETT</b> <b>LOW RISK 3</b>	<b>BERNARD PARKER</b> <b>HIGH RISK 10</b>
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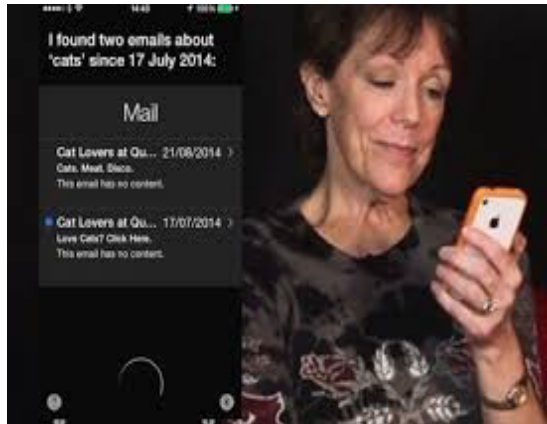
<b>JAMES RIVELLI</b> <b>LOW RISK 3</b>	<b>ROBERT CANNON</b> <b>MEDIUM RISK 6</b>
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<b>JAMES RIVELLI</b> Prior Offenses 1 domestic violence aggravated assault, 1 grand theft, 1 petty theft, 1 drug trafficking Subsequent Offenses 1 grand theft <b>LOW RISK 3</b>	<b>ROBERT CANNON</b> Prior Offense 1 petty theft Subsequent Offenses None <b>MEDIUM RISK 6</b>
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# What not enough people talk about: AI and exclusion



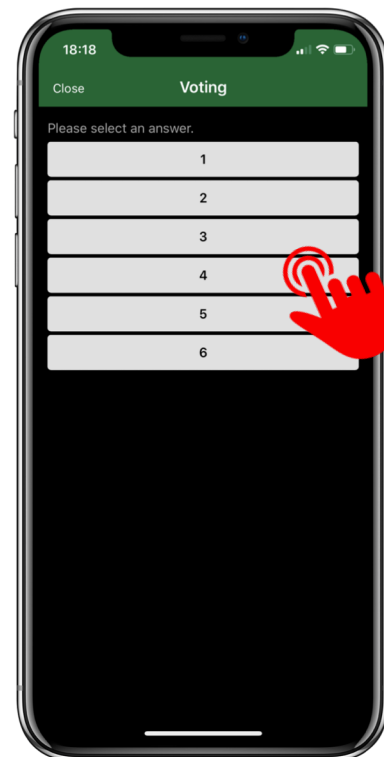
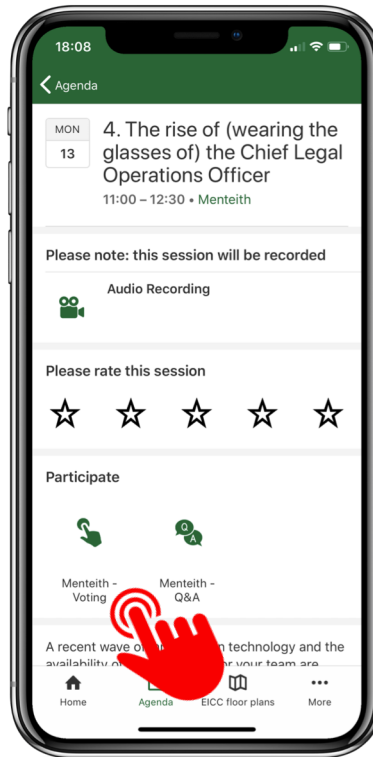
# Whose laws?



# Regulators v's the machines

# Voting

- ▶ Tap on the voting button from the session you are attending to vote
- ▶ Tap on the number corresponding to your choice



# If you had a choice of the following, which would you choose:

1. An AI based system which gave you 99% accuracy of potential cancers, but could not explain how it assessed its data and came to conclusions
2. A system which had 70% accuracy but was able to describe how it came to its conclusions.

A facial recognition system will detect anyone on your street who is known to have escaped from prison, but in doing so needs to scan the faces of everyone who walks by. Are you happy to have your face scanned and data stored?

1. Yes
2. No

# Commission on the use of AI in the criminal justice system





# Competing values – multi dimensional

Quality of services **vs** privacy **vs** efficiency

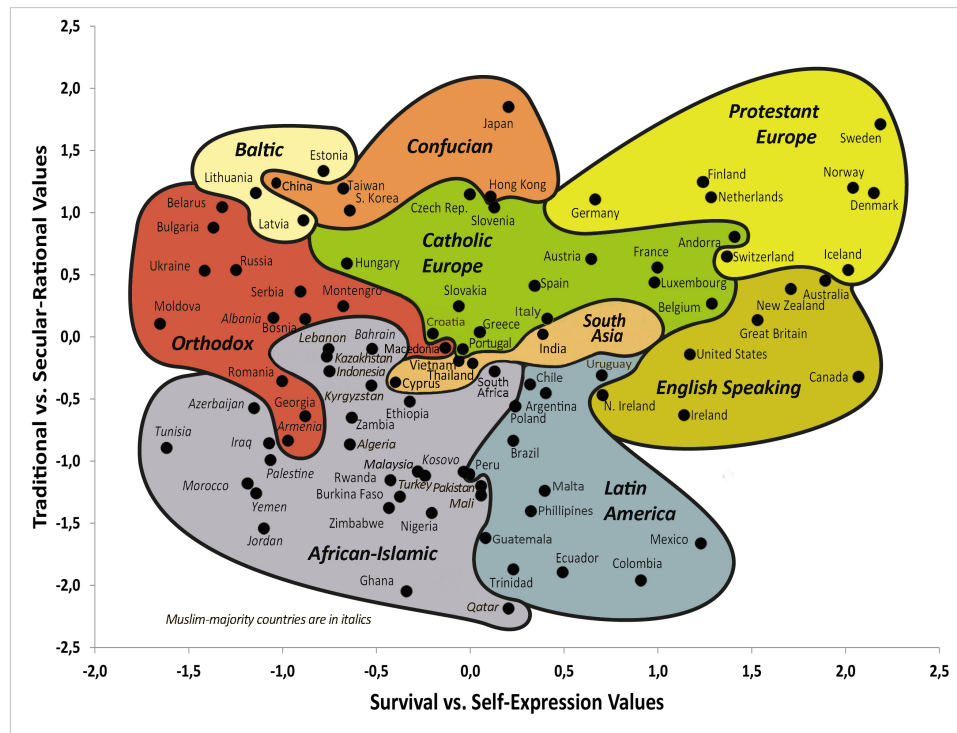
Personalisation **vs** solidarity and citizenship **vs** privacy

Convenience **vs** dignity **vs** privacy **vs** efficiency

Privacy **vs** transparency

Accuracy **vs** explainability **vs** Fairness

# Balancing values, rights, trade offs



# Key issues to keep in mind

Values are not static



# Key issues to keep in mind

Values are local v tech is global



**i.e. a mathematicians bias is not the same as the lawyers**



# To regulate or not to regulate .....

## That is the question?



# Film: Good in the Machine



# Bias

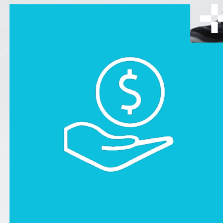




# Transparency and accountability: Explainability and choice

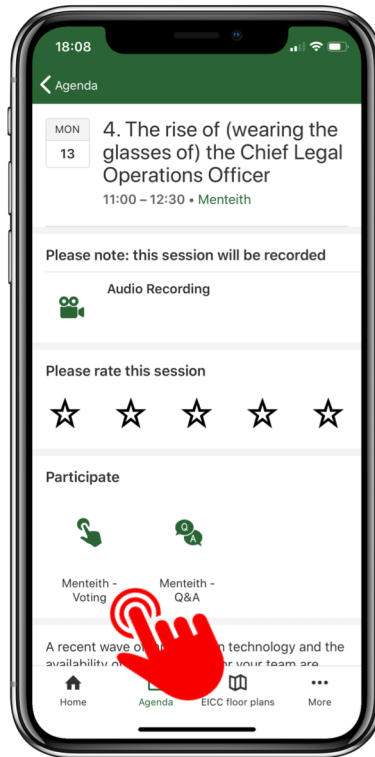


# Jobs/economy



# Voting

- ▶ Tap on the voting button from the session you are attending to vote
- ▶ Tap on the number corresponding to your choice



By the year 2030, AI technology will have displaced over 50% of legal jobs as they exist today:

1. Agree
2. Disagree



## Technology for good

Solving societies biggest  
problems through  
innovation and  
collaboration



## Data insight and predictive analytics

Industry, society  
and government  
working together



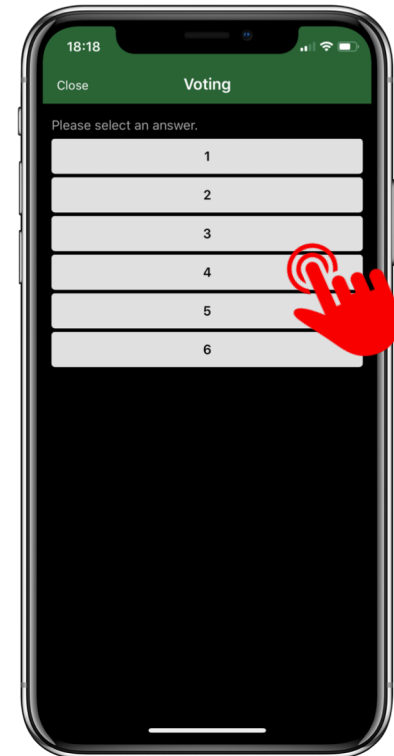
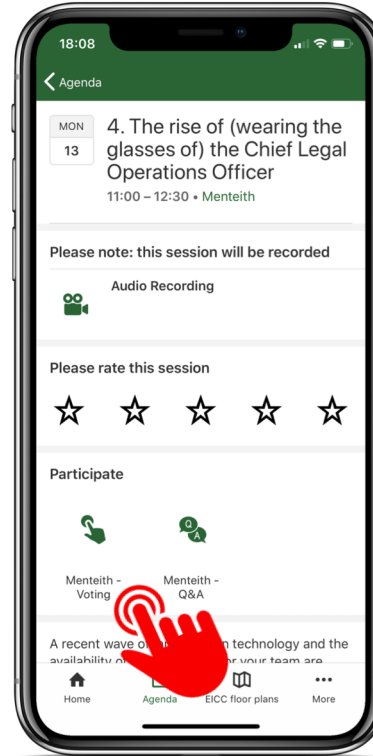
## Doing good

IS good business



# Voting

- ▶ Tap on the voting button from the session you are attending to vote
- ▶ Tap on the number corresponding to your choice

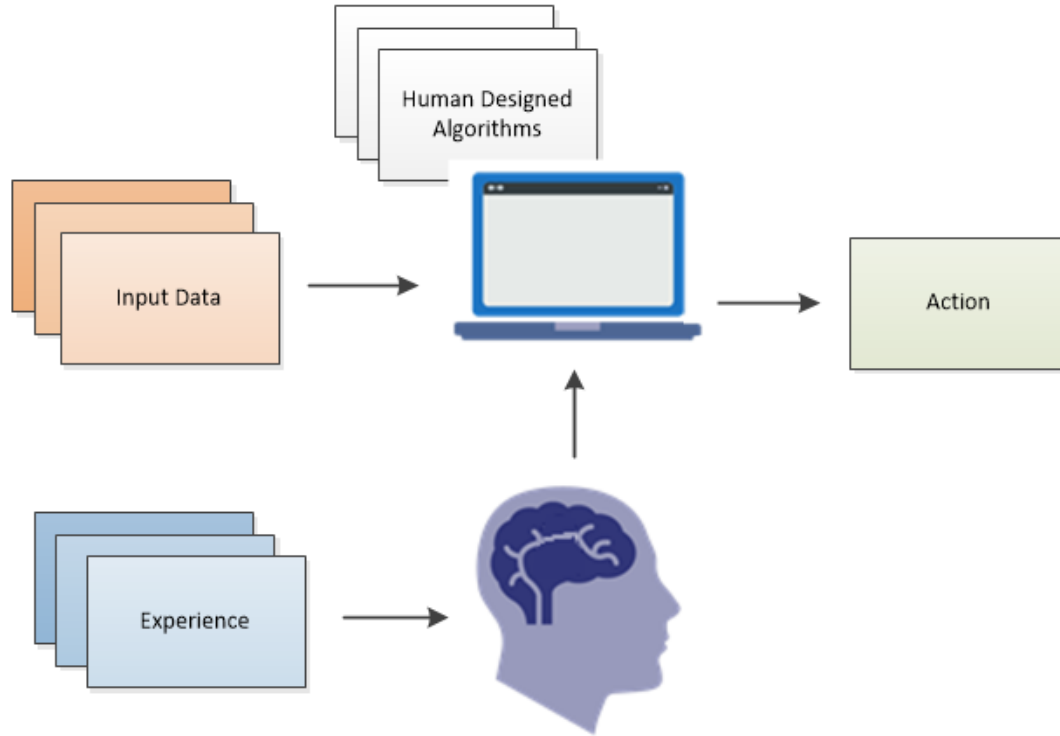


# How would you react if your court decision had been made by an algorithm not a judge?

1. Fine by me
2. Not at all

# Does AI pose new legal challenges?

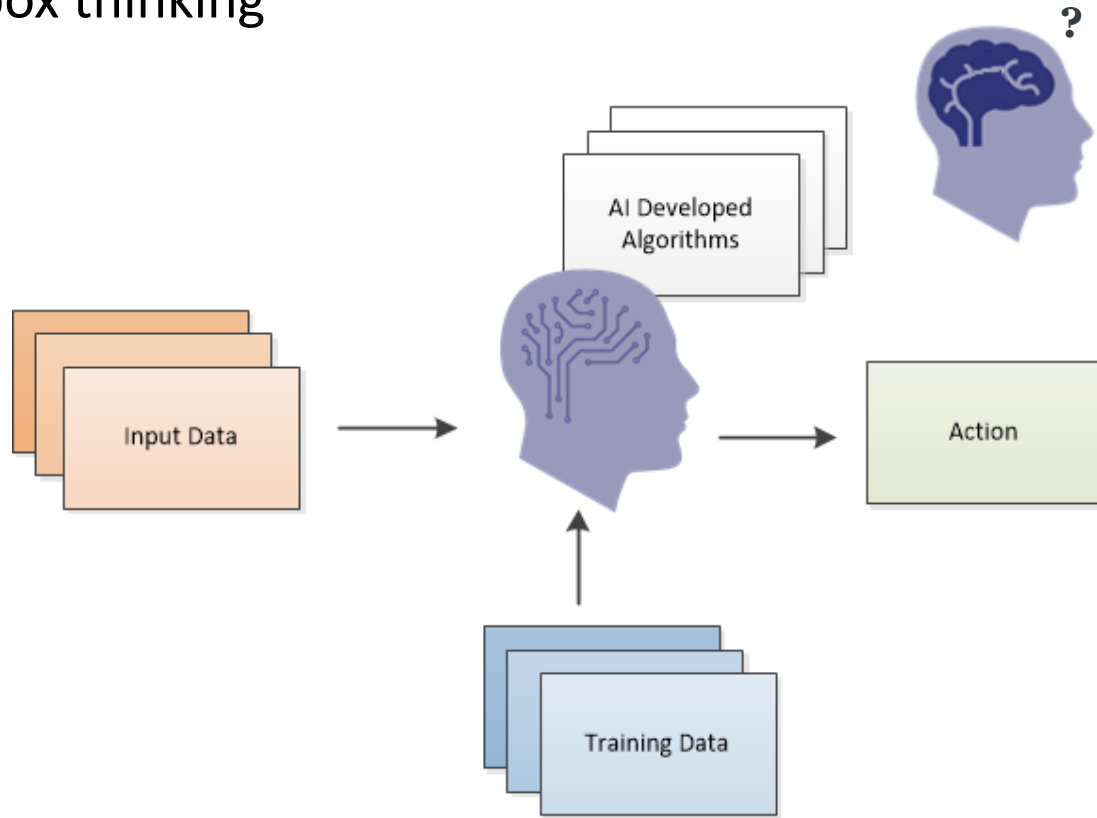
Human designed software



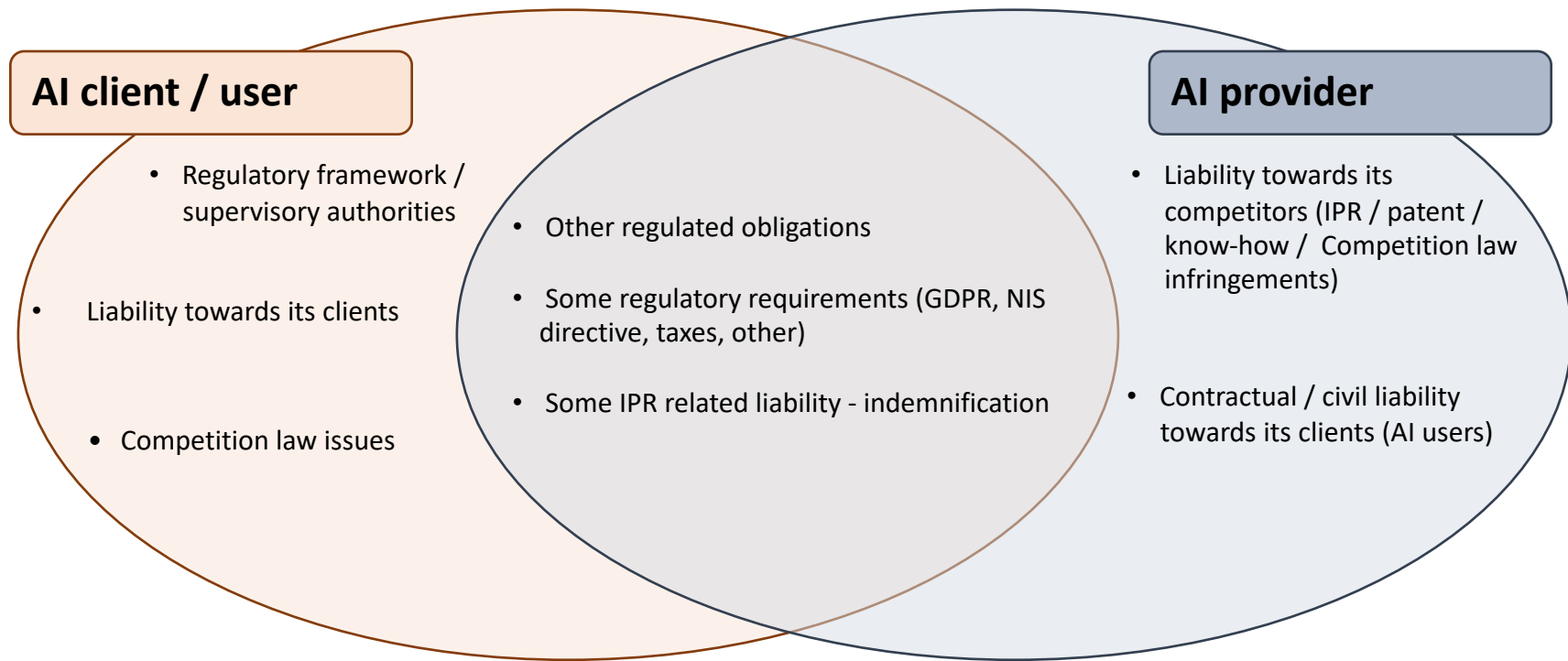


# Why does AI pose new legal challenges?

## Black box thinking



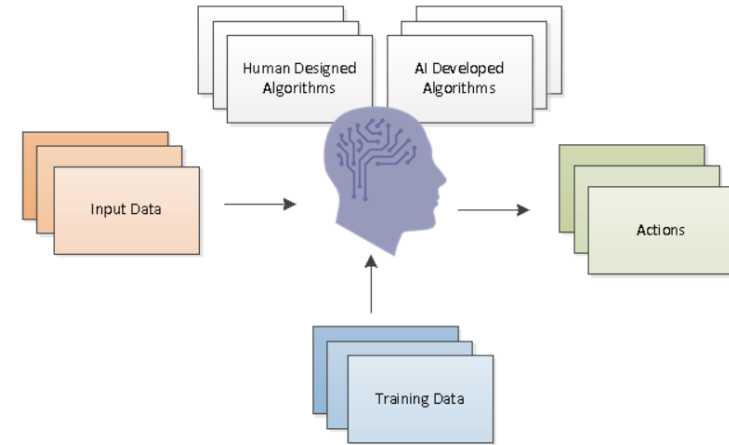
# Liability matrix



# AI and Liability

## Who is to blame?

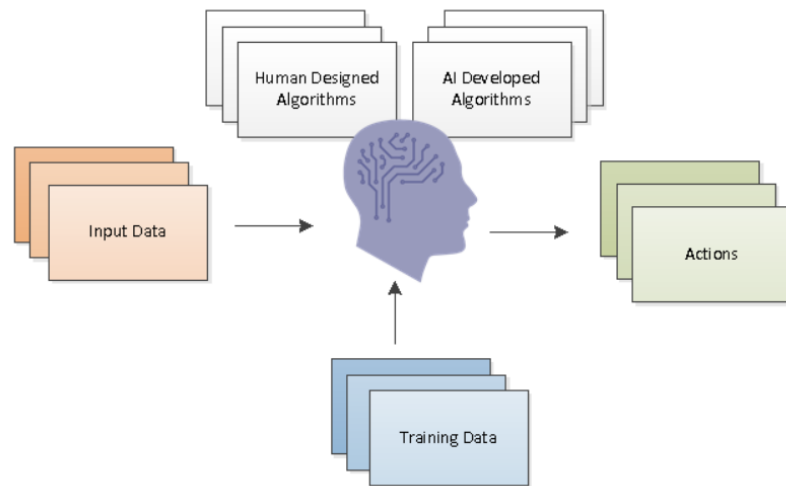
- AI is not a person so not itself to blame.
- In "traditional" software errors can be attributed.
- Machine Learning techniques mean attribution of fault is difficult.
- May not be clear **why** a decision was made.
- An unusual decision may not be an error at all.



# AI and Liability

## What to expect

- Customers will expect suppliers to take responsibility.
- Suppliers might be unwilling to give "traditional" software warranties – they might not be responsible for the decision.
- Attribution of fault.
- Could the "black box" be made transparent?
- Insurance?



# THANK YOU