Policing Facial Recognition Technology (FRT): Policy Considerations

Dr Elizabeth Farries
Director, UCD Centre for Digital Policy
digitalpolicy.ie
Twitter: @e farries | #UCDDigitalPolicy

UCD Centre for Digital Policy

Building digital policy capability amongst the public and private sector in Ireland and across the wider European Union.





James Lawless (Kildare North, Fianna Fail)

Link to this: Individually | In context | Oireachtas source

39. To ask the Tánaiste and Minister for Justice and Equality the status of plans to roll out facial recognition technology for use in policing; and if she will make a statement on the matter. [35658/22]

Helen McEntee (Meath East, Fine Gael)

Link to this: Individually | In context | Oireachtas source

The Government approved the publication of the Garda Síochána (Recording Devices) Bill, previously called the Digital Recordings Bill, on 21 June. The text of the Bill will be available shortly. This important Bill makes provision for Garda powers to use modern digital technology including body worn cameras, automatic number plate recognition (ANPR) and CCTV.

I also received Government approval to introduce amendments to the Bill at committee stage providing for the use of facial recognition technology. The amendments will set out how the new provisions will operate in practice. The exact parameters of these amendments have not been decided on and officials from my Department are consulting with relevant stakeholders and looking at international best practice.

I would like to assure the Deputy that safeguards will be built into the legislation and there will be full compliance with GDPR and the Data Protection Act of 2018. These safeguards will include a full human rights and data protection impact assessment.

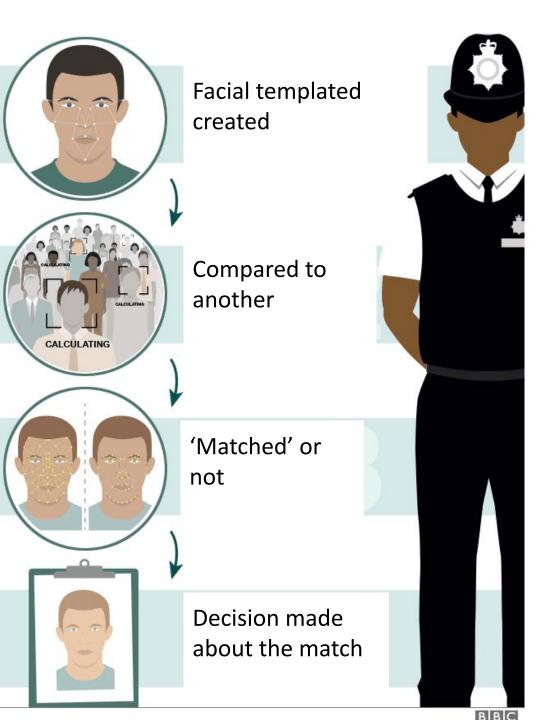
It is my intention to return to Government for approval of any proposed amendments in the autumn.

Written answers Tuesday, 5 July 2022

Department of Justice and Equality
An Garda Síochána

What is FRT?

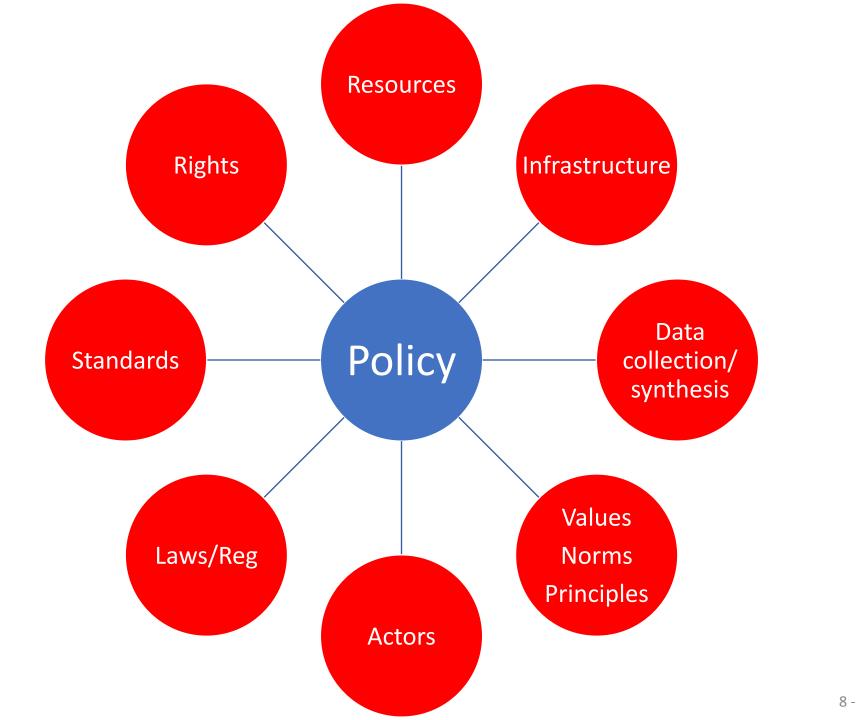
What is FRT for policing?



Policing FRT Operational assumptions

What are the benefits of FRT?

What are the risks?



8 - Elizabeth Farries

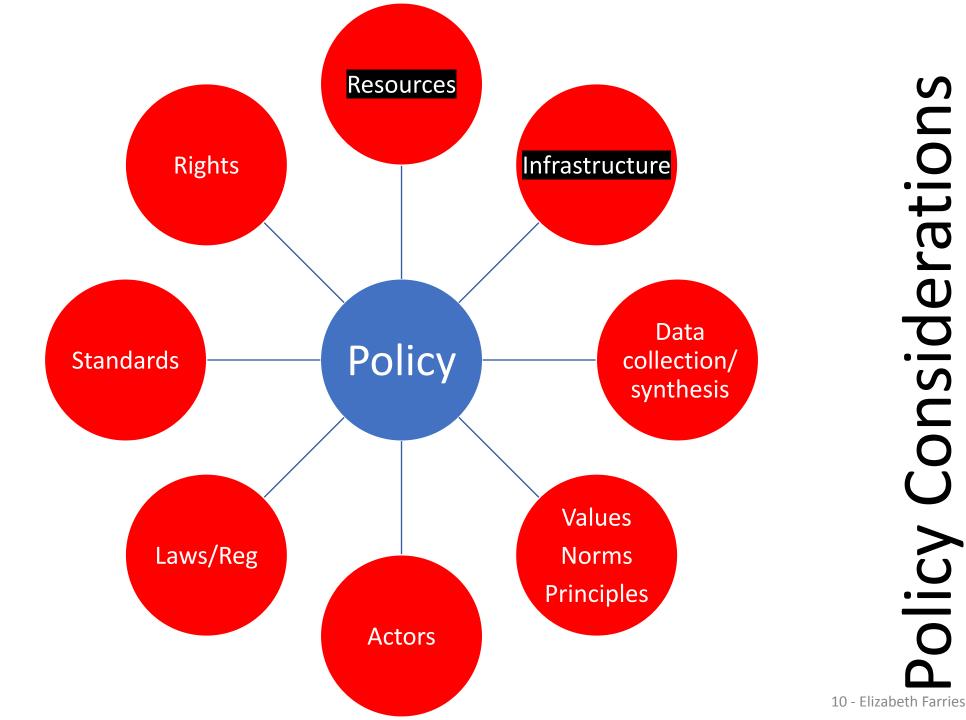
Framing policy issues: Policing FRT

Minister's framing: Policing resources are limited and crime management can be assisted by new forms of technology like FRT.

No Resources. Serious pressure on front line policing (<u>The Future of Policing in Ireland</u>, 2018, para 6)

No Technology. To help the guards record info about crime (para 24)

Solution? Give An Garda Síochána *new* powers to use FRT that could lead to identification of criminals 'within minutes'. (<u>Irish Times</u>, 2022)



Framing the issues: Policing FRT

Ideological assumptions attached to new tech:

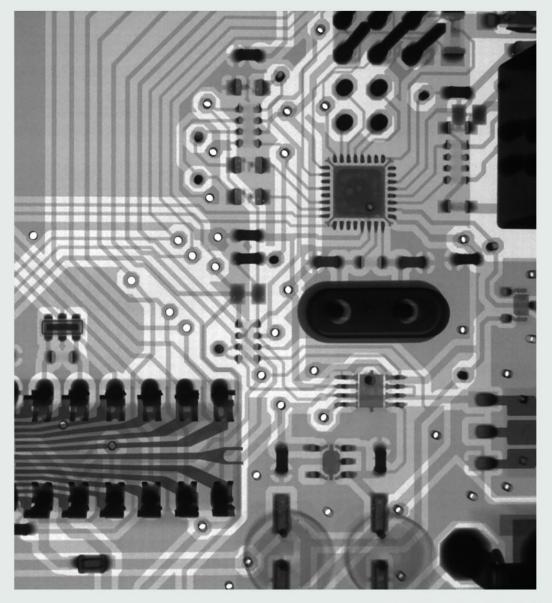
- Tech is neutral
- Tech brings solutions
- Tech is 'smart'

Does creating An Garda Síochána new powers to use FRT reflect 'tech solutionist' thinking?

Al Tech solutionism

The belief that every social problem has a solution based in technology.

See: Evgeny Morozov, To Save Everything, Click Here Technology, Solutionism, and the Urge to Fix Problems that Don't Exist (Public Affairs 2013)



Solutionism reflects an innate and untested trust in the ability of tech to solve problems effectively

Tech solutions?

CCTV – Community safety

Smart Watches - Improved health habits

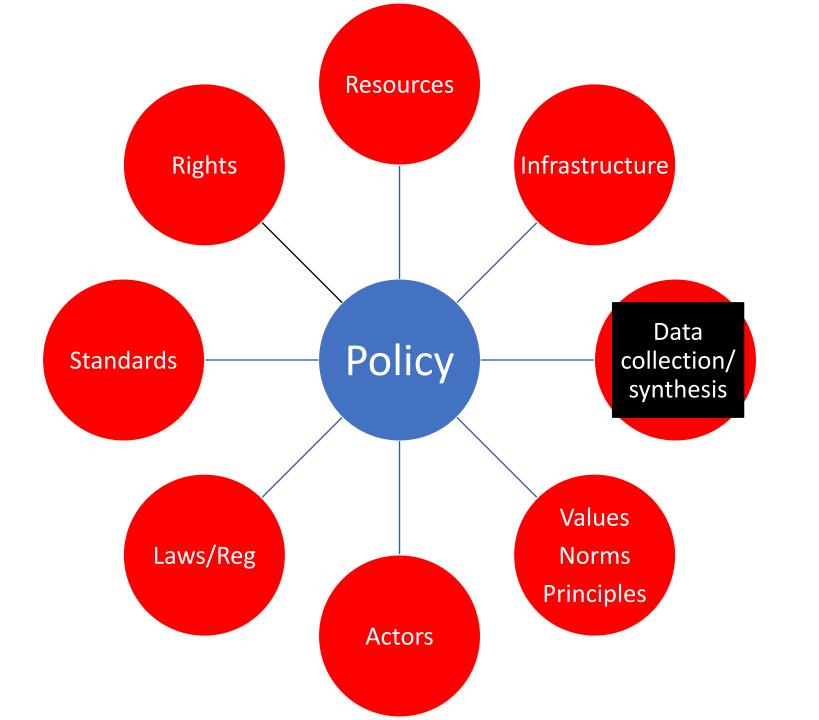
Online School Apps – connection to curriculum

... or Solutionism?

CCTV – public surveillance

Smart watches – personal surveillance

Online school apps – household surveillance



nsid 16 - Elizabeth Farries

Policing FRT: Ideology versus Evidence The data reveal a few risks...

- Accuracy (or lack thereof)
- Bias (in data sets and deployment)
- Discriminatory policing

Secondary evidence sources: Primary research, in peer reviewed literatures, policy papers, industry white papers, parliamentary transcripts, journalist outputs

Primary evidence sources: Researching, developing, testing, auditing, interjurisdictional research, consultations

Risk no 1: Accuracy

Fussy, P. & Murray, D. (2019)

- Face recognition performance on static images declines when confronted with variables including age OR gender OR ethnicity
- This effect is amplified when ALL three variables are combined
- FRT therefore performs less well if you are young, and also a woman, and most in particularly if you are a young black woman

See also: Gebru (2018) Gender Shades, US NIST (2019)

Accuracy: False Positives and Negatives





Risk no 2: Bias in the data

Benjamin (2019)

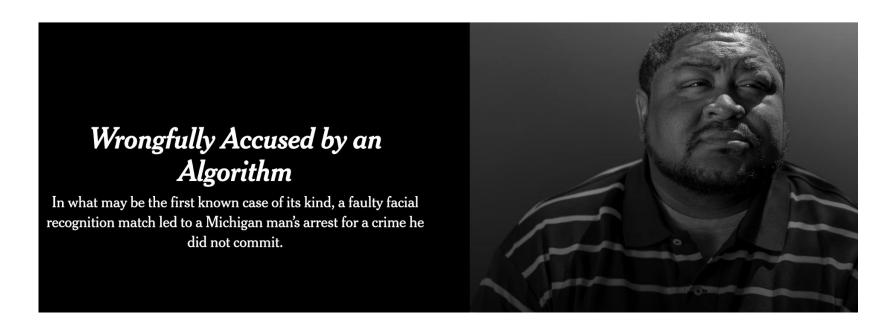
- Data sets are not value-neutral but reflect dominant perspectives
- Datasets allow AI/ML to create models which reproduce and exacerbate existing inequalities
- ACLU <u>tested Amazon</u>'s FRT software and found it did not work



Risk No 2: Bias in deployment ('primed for abuse')

Ada Lovelace (2022)

 FRT that clears data set bias in lab settings, can still reintroduce bias through deployment



'SCOPE CREEP' Bias in deployment beyond policing contexts to security, social media, classrooms, etc

First Nations man wants apology after being flagged as shoplifter, asked to leave Canadian Tire store













Company will not say if it is using facial recognition technology to identify shoplifters at Grant Park store



Austin Grabish · CBC News · Posted: Oct 19, 2022 5:00 AM CT | Last Updated: October 19



Risk no 3. Mass surveillance as a norm

Mass surveillance is **indiscriminate surveillance**

- **Stanley (2022)**: FRT has the ability to scan large amounts of publicly captured visual data so it can draw powerful inferences about people
- Guthrie Ferguson (2021): Such surveillance can create a broad mosaic of a person's activities, including their interests, movements, employment, religious practices, health issues, and social relationships

Unchecked FRT can draw portrait of you that is far more detailed than the characteristics of your face alone

Mass surveillance consequences

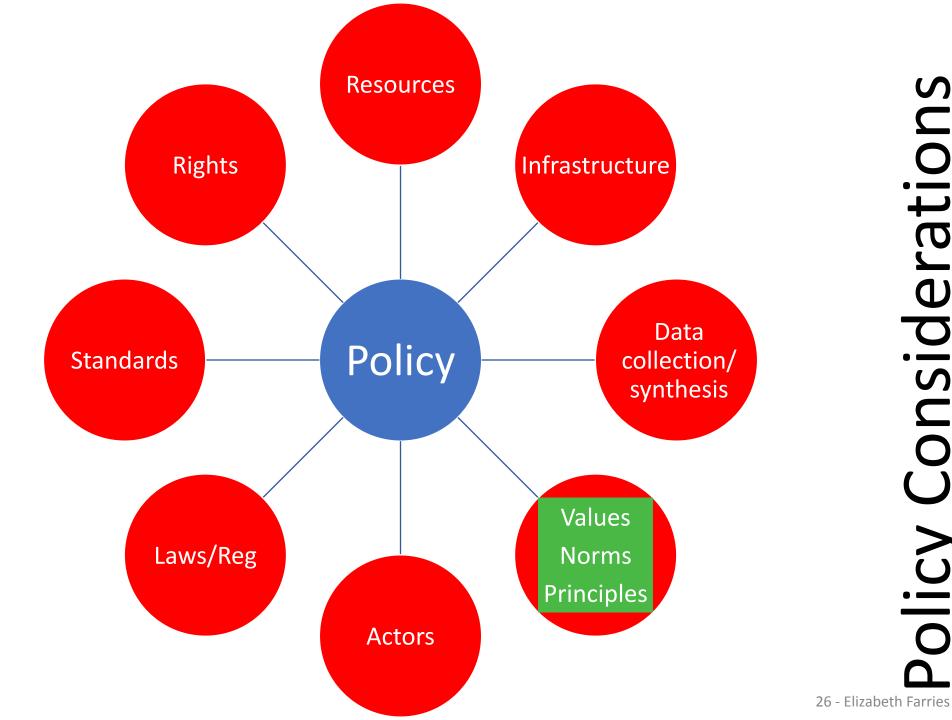
Chilling effects

- Stoycheff (2016) Surveillance technology [like FRT] threatens chilling effects on individual behavior
- Benjamin (2020) Reluctance to move freely due to concerns about being perpetually observed and watched by FRT for policing purposes can change the fabric of our society and the way people operate within it

Intersection: Tech Solutionism & Surveillance Societies

Al research, and computer vision in particular, is closely tied to mass surveillance (Ria Kalluri, 2023)

Near-population level monitoring capabilities used, for example, to surface individuals of potential interest to analysts, to identify and uncover networks, or to create in-depth individual profiles (Murray et al, 2023)



Weighing benefits and risks

Policy considerations

Solutionist Benefits (as ideals)	Identified Risks (established in the lit)
Efficiency	Accuracy (it doesn't do what is hoped)
Resources - pressure off front line policing	Bias (in development, uptake and deployment)
Better able to apprehend the bad guys	Mass surveillance as a norm

(Re)Framing the issue in Ireland: Policing FRT

Minister's framing: Policing resources are limited and crime management can be assisted by new forms of technology like FRT.

Alternative framing: Policing resources directed to technologies like FRT create new vulnerabilities through inaccuracy, bias and normalised mass surveillance

Resource misdirections. Into flawed technologies like FRT Discrimination impacts. In the data sets, development, and use

Consultation imperatives (at the outset)

Experts' response: It's too dangerous. Our open letter to Irish Times from experts at 7 universities and 13 NGOs in Ireland

Letters

Garda use of facial recognition technologies unnecessary and disproportionate

It may have significant chilling effects, altering how people use public and online spaces

Thu Jun 2 2022 - 00:11







Sir, - The Minister for Justice plans to expand the Garda's surveillance powers with policing facial recognition technologies (FRT). While some believe that using FRT may help make us safer, the undersigned experts from seven universities and 12 NGOs in Ireland know the risks are too significant.

LATEST STORIES >

NFL: Vonnie B'Vsean Miller the difference between and Chiefs

Bank of America tops loan revenue estimates an interest rates

Regency hotel shooting: Jonathan Dowdall jailed years for role in attack

Ireland Policing FRT Expert intervention chronology:

- 2 June 2022. Open letter to the Irish Times, signatories from 7 universities and 13
 NGOs in Ireland
- June 2022. Dept of Justice meeting 'We will proceed with prior policing FRT plans
- 20 June 2022. Expert Letter to Oireachtas Cabinet Members: Policing FRT
- **30 September 2022**. United Nations Special Rapporteurs letter to the Irish Government. OL IRL 3/2022.
- 10 November 2023. Briefing from Dept of Justice
- 22 November 2023. Follow up letter to Minister of Justice
- 13 April 2023. A list of questions to the DPC
- 18 April 2023. Op-Ed in the Irish Times
- 10 May 2023. Expert briefing note on the democratic and technical requirements for policing FRT



Government Legislation Programme

Autumn Session 2023

|--|

Thank you!

Dr Elizabeth Farries
Director, UCD Centre for Digital Policy
digitalpolicy.ie
Twitter: @e_farries | #UCDDigitalPolicy