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OECD-OJK Roundtable on leveraging technology for risk assessment and risk reduction in insurance

Insurance, AI and New Data Sources: The Risk of Consumer Harm

Dr Zofia Bednarz

Lecturer, University of Sydney Law School

Associate Investigator, Australian Research Council Centre of Excellence for Automated Decision-Making and Society

THE UNIVERSITY OF SYDNEY

Introduction: Insurance – a data-driven industry

What's new?

- access to new, non-traditional sources of data
- increased opacity:
  - corporate opacity
    - trade secrets and opacity of third-party models
    - complex corporate structures
  - technical opacity or lack of 'explainability'
  - data opacity

Overview of potential harm to consumers

(1) bias and discrimination

(2) unfair use of data

(3) price optimization practices

(4) exclusion and unaffordability of insurance for vulnerable consumers

(5) consequences for risk pooling

(1) bias and discrimination

access to new sources of data

The New York Times

New Suit Uses Data to Back Racial Bias Claims Against State Farm

Black customers have long claimed that the nation's largest home insurer discriminates against them. A lawsuit claims a nine-month study provides some proof.

The New York Times, 14 December 2022

AI bias

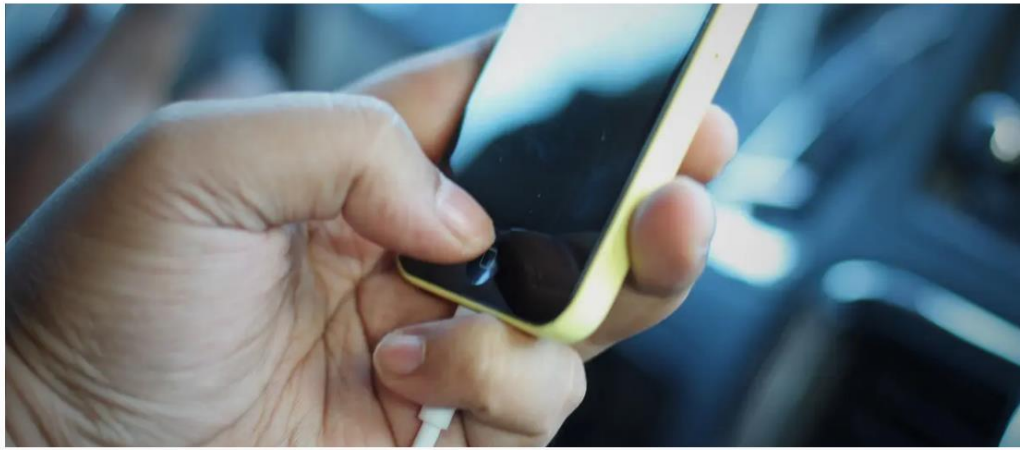
- when protected characteristic has predictive value
- bias (e.g. historical) in the data
- personalisation → unobservable discrimination

(2) unfair use of data

Sorry iPhone Fans, Android Users Are Safer Drivers

Henry Hoenig

Updated on Aug 12, 2023 · 4 min read



Sorry iPhone Fans, Android Users Are Safer Drivers | GetJerry.com

‘all data is insurance data’ – or is it?

— data minimization principle

— interference with privacy

- wearables and tracking devices
- collection of information from third parties, e.g. customer loyalty schemes, social media

— accuracy of data

(3) price optimisation practices

personalised premiums

— not linked to risk but rather willingness to pay

— data revealing individual consumers' price sensitivity and likelihood to shop around

—could be even analysis of online behaviour (websites visited etc.)

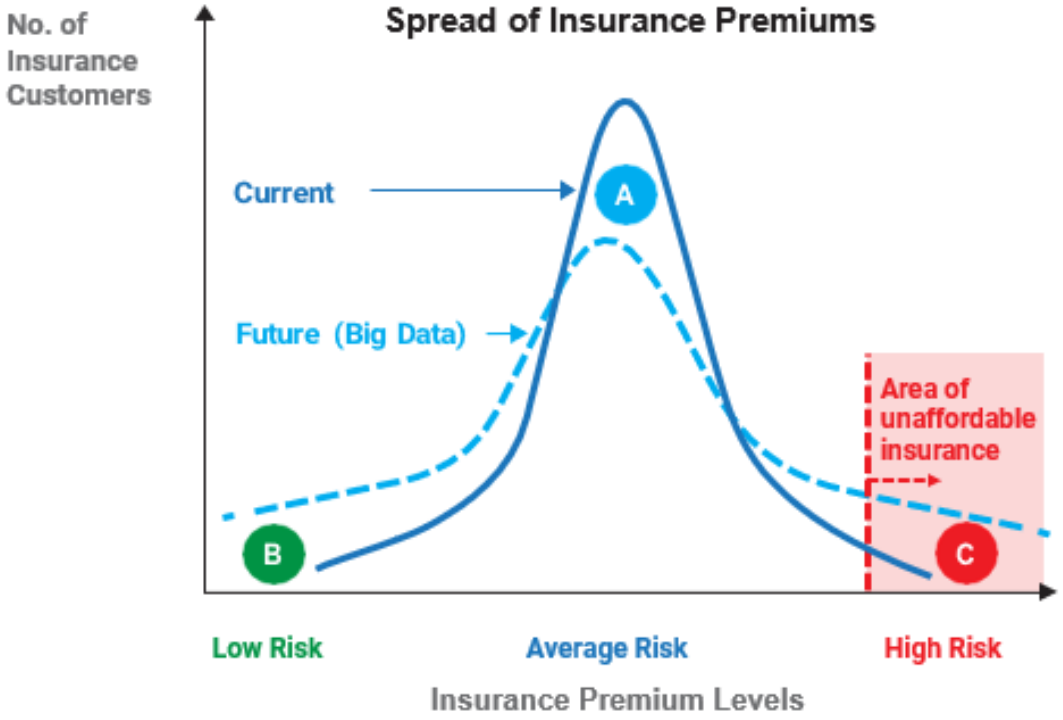
https://www.carriermanagement.com/news/2015/11/18/147947.htm

(4) exclusion of vulnerable consumers

- ‘open insurance’ or ‘open finance’ as new sources of data: replacing of traditional questionnaires with data transfers
- ‘cherry-picking’ and ‘lemon-dropping’ – but now in the digital space
- mis-selling of insurance: targeting of vulnerable consumers with poor quality products

Misconduct in the Banking, Superannuation and Financial Services Industry | Royal Commissions

(5) consequences for risk pooling



Source: Actuaries Institute (2016), Green Paper: The Impact of Big Data on the Future of Insurance

'The use of data is something I think regulators will have to look at, because if you get down to insuring the individual, you don't have an insurance industry — you just create people who don't need insurance and people who aren't insurable.'

Aviva UK general insurance CEO (2020)

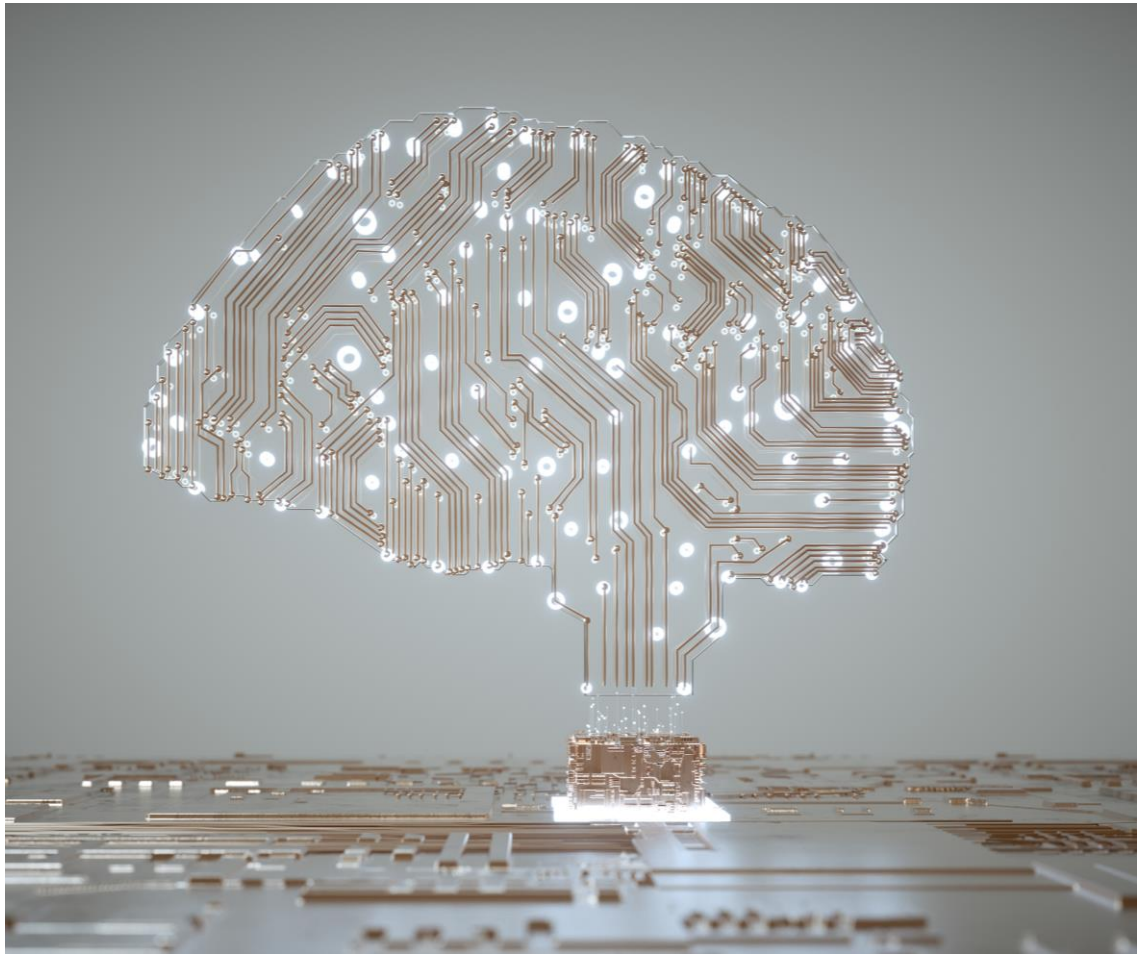
Conclusions

What's new?

— new sources of data and means to analyse it

— potential for consumer harms

— but also: hype around AI in itself is a risk to consumers



Get in touch

Dr Zofia Bednarz

Lecturer, *Sydney Law School*

Associate Investigator, *ARC CE ADM+S*

email: zofia.bednarz@sydney.edu.au

Zofia Bednarz

@ZofiaBednarz1

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