

3<sup>rd</sup> Seminar on Data Science & Analytics  
27 July 2019 | Bengaluru, India

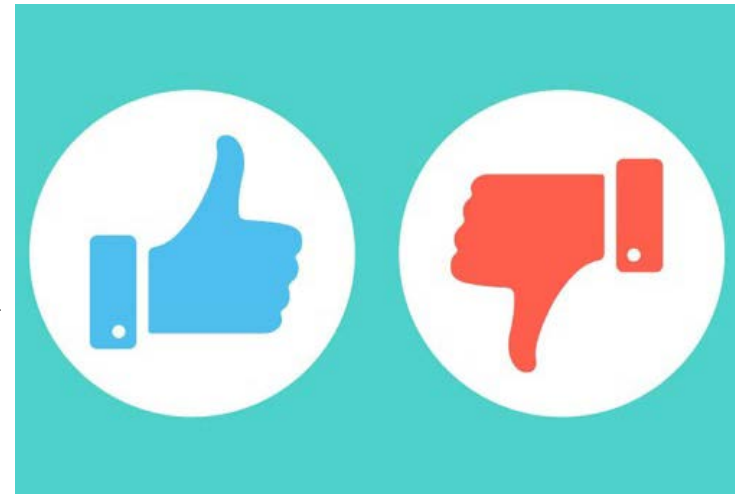
# Math Men and not Mad Men

**John Taylor**  
**President, Institute and Faculty of Actuaries**



# Today's Discussion

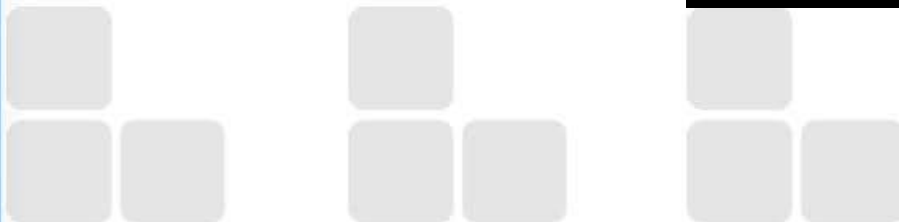
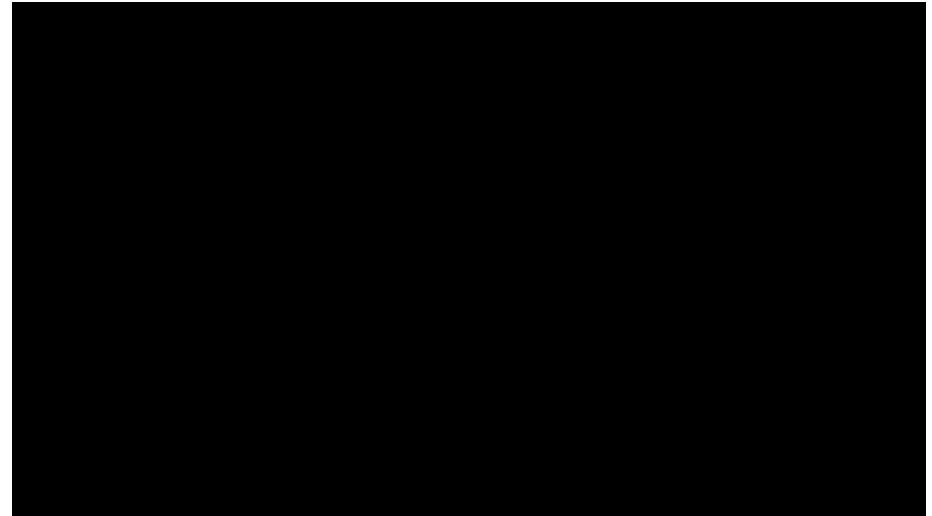
- The IFoA's progress
- Ethics in data science
- Democratisation of risk
- The road ahead
- Your questions



# The IFoA's Progress



- Certificate in data science
- Virtual conference
- Ethics partnerships
- And more...



# Certificate in Data Science



- Due to be launched in Spring 2020
- Available to all IFoA Members
- No previous experience in Data Science required
- Potential Content:
  1. Introduction to Data Science and techniques
  2. Application of data science techniques to solve real world problems
  3. Data Analytics
  4. Machine Learning and Artificial Intelligence techniques
  5. Practical Issues to consider in the application of Data Science
- Ongoing CPD will be required to maintain the Certificate

# Affecting our core business



- Pricing
- Claims
- Enabling an innovative insurtech proposition

*Lemonade* **ROOT**



# Ethics in data science



## CAMPAIGN TO **STOP** KILLER ROBOTS

- Increase societal well-being
- Avoid harm
- Maintain and execute professional competence
- Act to preserve or increase trust
- Maintain human accountability and oversight

# UK experience of data science in insurance

## Facebook forces Admiral to pull plan to price car insurance based on posts

**Insurer withdraws initiative with hours to go as privacy campaigners criticise 'intrusive' attempt to analyse users' data**



▲ Facebook said the privacy of its users was of the 'utmost importance'. Photograph: Karen Bleier/AFP/Getty Images

Admiral has been forced to scrap plans to use [Facebook posts to analyse the personalities of car owners](#) and set the price of their insurance after the social media company said the scheme breached its privacy rules.

In an embarrassing U-turn the insurance firm nulled the product less than

# Democratisation of risk



It's clear to us that employers and insurance companies have been successful in reducing their exposures. The underlying risks have not gone away; they now rest with individuals. ...

I'm not sure many individuals welcome the fact that these actuarial risks have been passed on to them. Individuals may not even realise the responsibility is theirs, let alone have the aptitude to deal with it. If serving the public interest means anything, it means we have an obligation to help. We are the masters at managing actuarial risks. We need to find ways of helping individuals.

*Presidential address, June 2019*



# Strategic context: Market for advice

## Demand

- 30m UK adults
- Unwilling/unable to pay for advice
- Individual responsibility
- Under-saving
- Complex challenges

## Supply

- c. 20k UK advisers
- Cost of advice
- Access/availability

## Consumer Behaviour

- More online/mobile
- Higher expectations
- Increasingly comfortable with finances
- Value convenience – 24/7
- Anonymity

## Technological Enablement

- Broadband
- Cloud
- Scale
- Repeatability

# A broad church



# Tomorrow's destination

- Data Science, Artificial Intelligence, Machine Learning, Internet of Things and Social Media all represent a major opportunity for the actuarial profession
- Actuaries and aspiring actuaries should explore and venture into newer fields
- Co-operation between different actuarial associations will enable the profession to make the most of the opportunity; otherwise, we may become marginalized



Questions

Comments

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