



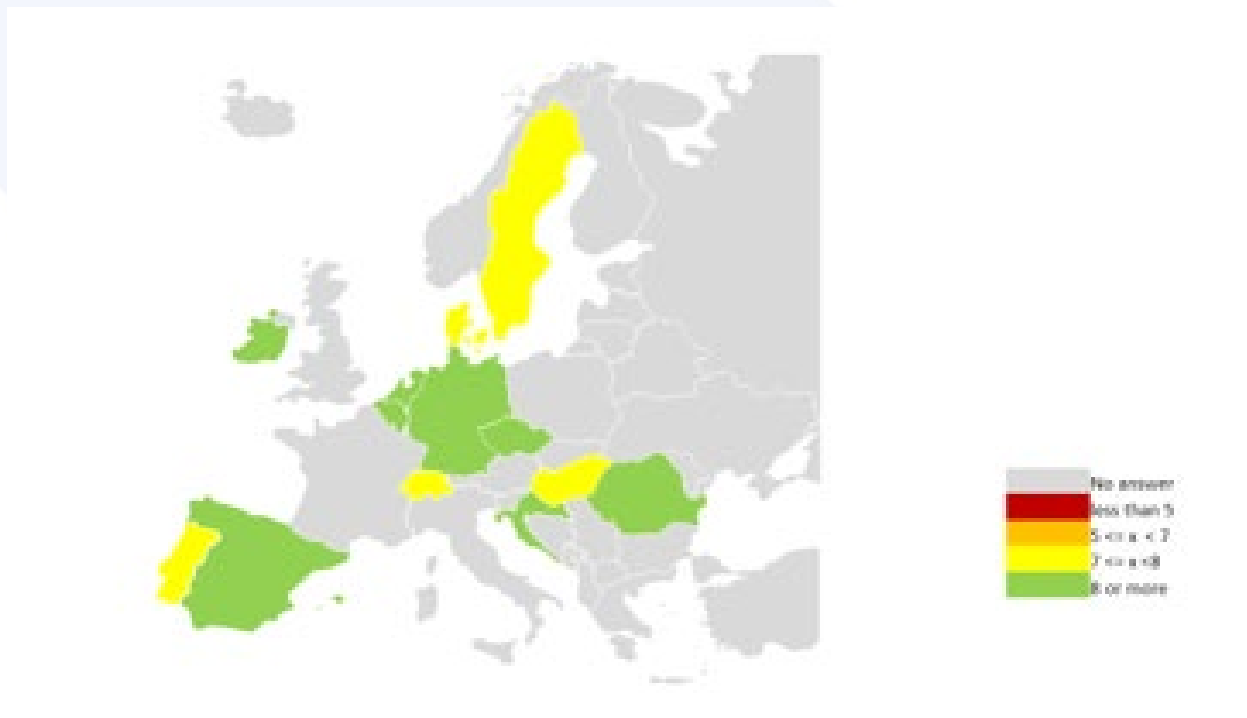
MA Survey on AI/DS by the AI/DS workstream of the RoA Taskforce

Esko Kivisaari, 9 October 2020

Meeting of the Professionalism Committee

Consequences of DS/AI for the Actuarial profession

On a scale from 1 to 10, with 10 meaning fundamental consequences, nobody gave a rating below 5. The average rating was 8.25 and 25% of the respondents rated the consequences with the highest possible 10, which means the consequences are fundamental for the Actuarial Profession.



Positive consequences

- Attractivity for the profession: to attract new people to the profession
- Improvement of our existing service: get more and deeper insights, faster analysis of large amounts of data, become more efficient, Actuaries can focus on real added value services and gain higher precision
- New opportunities for Actuaries: expand the scope of work, making them more relevant outside financial services like medical, engineering, energy, environmental, etc., a chance to expand actuarial work within insurance companies to marketing, underwriting and claims management processes
- Strengthen the relevance of our profession

Negative consequences

- Job destruction: less actuaries are needed than before.
- Job downgrade: Actuaries are used as programmers and some typical actuarial skills become less relevant
- More education is needed (negative consequence?)
- Model risk of DS/AI is not well understood with black boxes, lack of deep understanding of insurance business, and the risk falls back on the actuary (negative consequence or opportunity?)
- Role of the actuary and ethics, AI enables inequality and discrimination, decision taking by algorithms (negative consequence or opportunity?)

Expectations towards the AAE

- Training
 - online courses together with member associations, universities and Actuvview
 - Offering a roadmap on courses including ratings and compulsory courses
 - Reduce training gap between traditional education and this new education
- Exchange
- Research
- Guidelines/Standards
 - Education
 - Ethics
 - Professionalism
 - Create awareness on the adequate governance that should be in place before using AI
 - Share best practices in applying DS/AI. For example, sharing some cases where a new technology was successfully applied/verified/monitored
 - Keep actuaries updated in terms of the DS/AI models
- Lobbying
 - European institutions
 - Employers
 - Strengthen the role of the actuarial function / appointed actuary
 - Defend the profession: Advocate with all stakeholders why actuaries are well placed/needed to handle data science topics
 - Lead the change
- Connect
 - Strengthen collaboration between member associations
 - coordinate joint efforts of the MAs to meet the challenges via CPD, common practicing, ethical and professionalism standards
 - Actuaries with non-actuarial experts from related professions
- Marketing