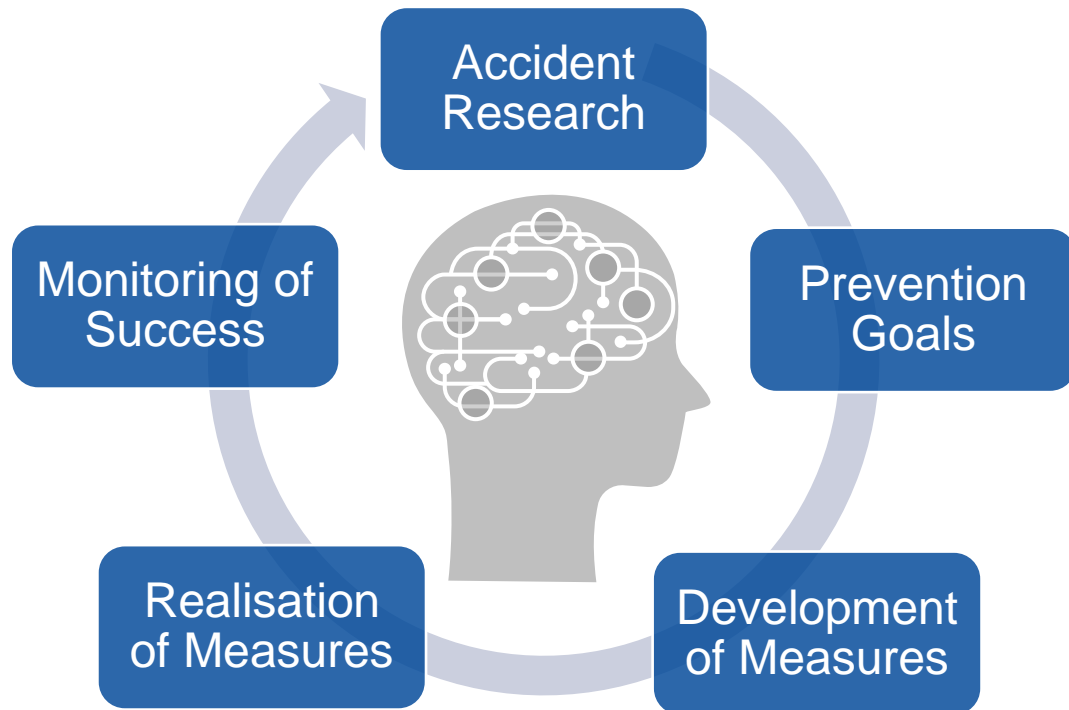


Potentials and Challenges of Artificial Intelligence and Robotics for the Safety in Home and Leisure

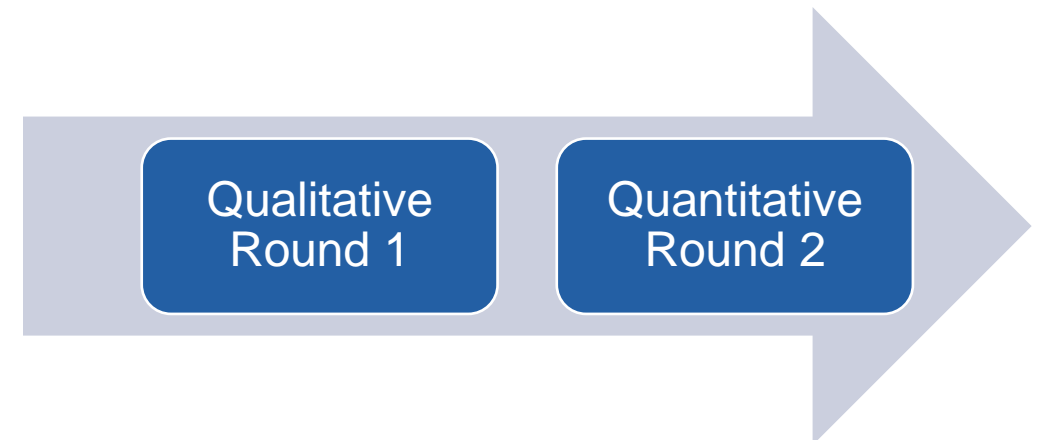
Michael Nader, Johanna Trauner-Karner – KFV (Austrian Road Safety Board)

Where do potentials and challenges lie?



Methodology

- Two-stage real-time Delphi survey
- 42 international experts
- 61% R&D AI and Robotics
- 39% Accident Prevention and Politics



20 – 25% of home, sport and leisure accidents could be **prevented** by AI & Robotics by 2030



Potentials

| | |
|--------------------------|-----|
| Senior households | 7.5 |
| Rescue of injured people | 7.2 |
| Accident research | 7.1 |
| Safety in sports | 6.5 |
| Households with children | 5.8 |
| DIY | 5.7 |



Barriers

| | |
|------------------------------|-----|
| Restrictive legal frameworks | 6.2 |
| Know-How in companies | 6.1 |
| Acceptance in population | 5.9 |
| Availability of data | 5.8 |
| Quality of data | 5.5 |
| Implementation costs | 5.2 |

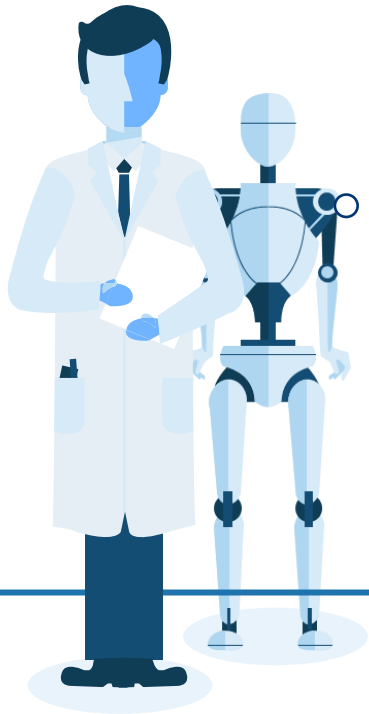


Risks

| | |
|-------------------------|-----|
| Surveillance | 6.8 |
| Hacking | 5.9 |
| Personal responsibility | 5.7 |
| Manipulation | 4.9 |
| Unreliability of AI | 4.7 |
| Supremacy | 2.4 |

Expert agreement, mean values, 10 = totally agree

Implications for injury prevention units



Recognize the potential of AI and Robotics for injury prevention in home, sports & leisure



Make accident **data AI-ready** – homogenize and link existing data sources



Support regulation process for more safety in AI & Robotics (e.g. liability issues, AI MOT)



Build and **expand competences** in AI and Robotics in your organization



Conduct trails with AI and Robotics applications – risk failing and learn