Commercial Insurance Perspective

A presentation to CAS Special Interest Seminar
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TOWERS WATSON

Commercial Perspective

- Personal lines telematics models generally focus on improved measurement of risk
- Commercial models generally focus on using telematics-derived information to change risk within the fleet
  - An isolated risky event becomes a component of a highly complex model that introduces a wide range of new variables
  - Measuring the outcome is more complex and uncertain

Commercial fleets want to reduce costs

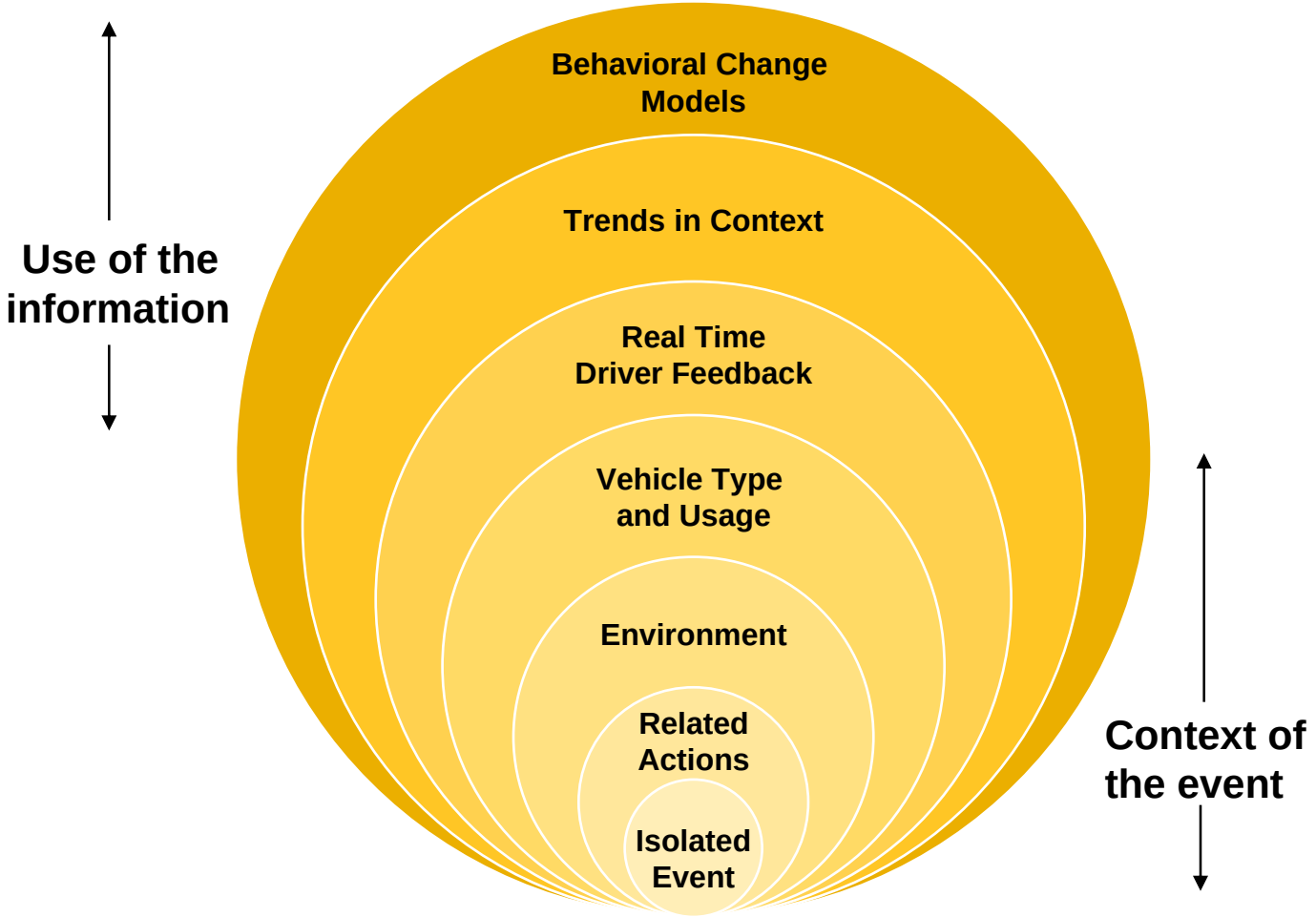
- Telematics applications vary widely — only a portion of solutions are likely to have a material impact on reducing crashes and crash costs
- Most commercial telematics applications have focused on creating operational efficiency
  - The benefits accrue primarily to the fleet in reduced operating costs
  - Reduction of crash costs directly impacts insurers
- The total value proposition to the customer may include components of both models

Risky Driving Events in Context

- A risky driving event such as a hard brake is observed by the telematics sensors
- In a typical UBI model a counter collects the frequency of these hard brakes
- The number of events combined with other factors such as speed and time of day form the basis for risk measurements

Risk Management Model

Context of a Risky Event



Related Actions

- Place the risky event into context
  - Isolated event or connected to other behaviors
    - Cornering
    - Lane change
    - Backing
  - Environment of trip location
  - Frequency during current trip
  - Vehicle characteristics
  - Severity of event

Environment

- Driver actions/decisions in context of the environmental conditions
  - Type of road
  - Weather conditions
  - Road conditions
  - Time of day
  - Traffic patterns
  - Location

Vehicle Type and Use

- The type of vehicle introduces a complex set of measurement variables
  - Size (mass)
  - Center of gravity
  - Empty or full
  - Straight or articulated
  - Type of cargo — goods or people
  - Type of route

Vehicle Type Example — Bus

- Goal is to reduce passenger injuries
  - Many types of buses
    - Para-transit, school bus, articulated transit bus
  - Passengers may be standing
  - Environmental conditions impact the risk of the event
- The threshold for the event may be quite different if the goal is reducing passenger injuries

Using the Information

- The framework of measurement creates complexity and variability
- The programmatic application of the information adds substantial complexity
- Programs that use this information vary widely in both approach and effectiveness
  - Resulting in a wide variation of knowledge one can attach to the risky event

Driver Behavior Programs

- Driver behaviors (decisions) are a contributing factor in over 90% of all crashes
- If drivers change the way they make decisions, there is significant potential to influence the frequency and severity of crashes
- Feedback from telematics systems can inform driver behavioral change programs

Behavior Change Management

- Coaching
  - In-vehicle
  - Post trip
- Integration with existing risk engineering/loss control models
- Incentives
  - Positive motivation
  - Consequences and negative motivators
- Informing training programs based on issues and trends

In-vehicle Feedback

- In some telematics-based programs, the change management process begins in the vehicle — in real time
  - Feedback and approach vary significantly
    - Video — significant events
    - Lights or voice — more granular events
    - Combination of methods
  - The presence of the system alone influences behavior
- In-vehicle feedback creates context

Variety of Behavioral Models

- Introduces a significant variability of outcomes and effectiveness
- Outcomes are impacted by company culture and management approach
- Models vary by driver type — for example:
  - Professional drivers, or
  - Cable repair people who happen to drive as part of their job

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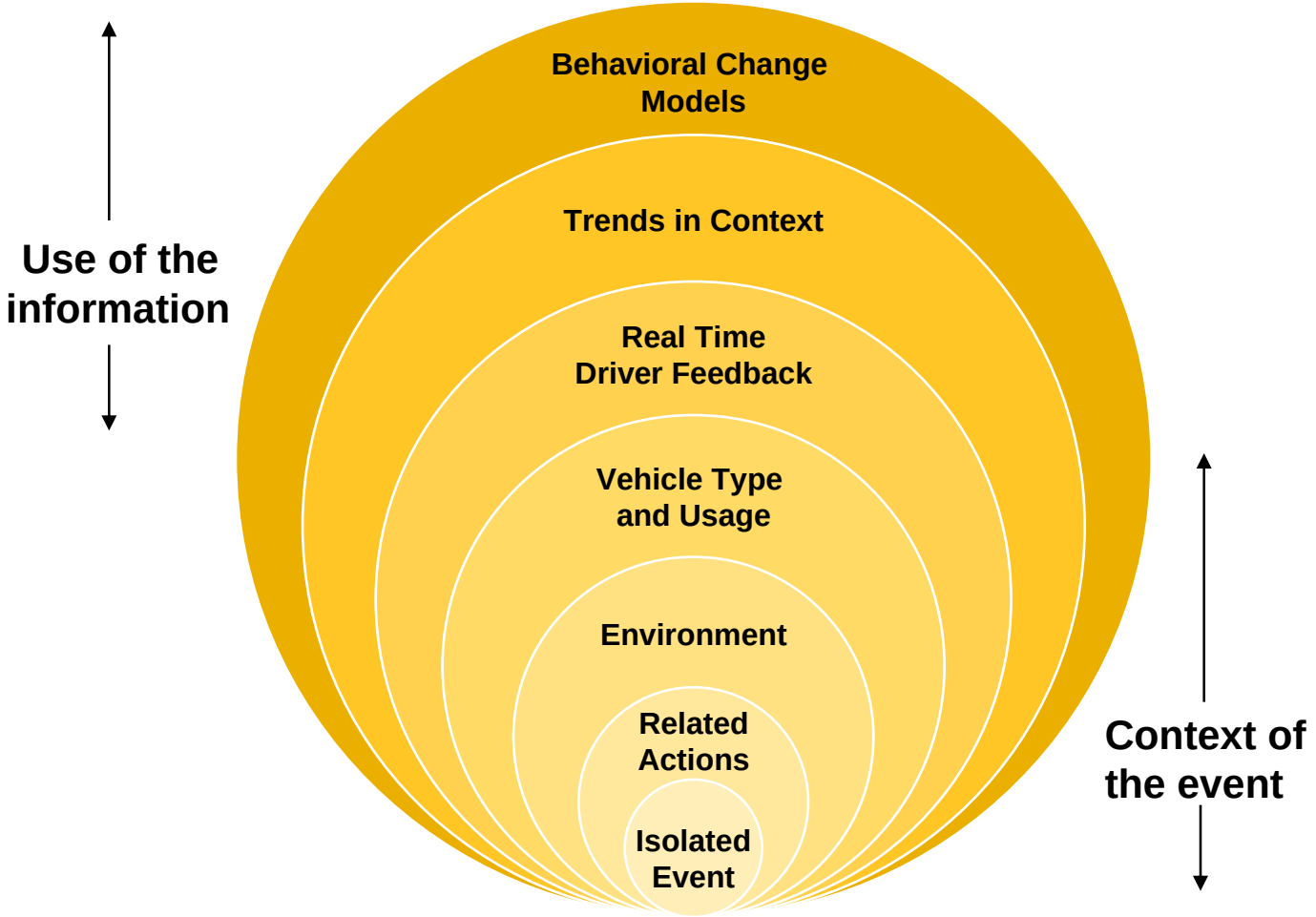

Conclusion

- In a commercial telematics program, the measurement of a “simple” risky event is only the core of a substantially more complex set of variables
  - Each contributes to overall risk reduction
- The next steps
  - Identify factors that influence the change in risk with the most positive effect on outcomes
  - Incorporate value proposition into the offering

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