Safety in Motion
Off Road Artificial Intelligence

QUAD BIKE SAFETY TASKFORCE ISSUES PAPER SUBMISSION

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Overview

Safety in Motion is an Australian artificial intelligence (AI) startup targeting off road safety.

Our mission is closely aligned with the Tasmanian Government's desire to address the issue of quad bike safety. Indeed quad bike safety is our reason for being in the first place.

We submit that it would be cost-effective and differentiating for Tasmania to place some emphasis on information technology (IT), including AI, in its quad bike safety strategy.

We make several specific, low cost suggestions as to how that could be realised and stand ready to work with the Task Force and relevant agencies to implement some simple, low cost measures.

Safety in Motion

Safety in Motion is a recently-formed Australian AI startup targeting off road safety, with a development road map from crash-detection alert systems to a full suite of driver monitoring, feedback and training services, ultimately leading to design of driverless vehicles.

It is a joint venture of:
- Harrington Systems Electronics, which produces a range of remote monitoring products for agriculture, founded by William Harrington, a computer systems engineer and cattle farmer, and
- Murray Hancock, an experienced entrepreneur and investor in IT, telecoms and energy

Our first product, to be launched in April, is a smartphone app called Rollover! which:
- is an advanced crash detection system, leveraging the pervasive smartphone hardware and software platform
- alerts emergency contacts *automatically* with critical information in the event of a rollover or other accident, and
- has the primary purpose of getting help to victims faster, reducing deaths and suffering.

The Rollover! App

The app is a unique, high value, low cost contribution to quad bike safety.

It will be available for free trial on iPhone/iOS, Android and Windows Mobile devices and will operate in the background with minimal user input after initial setup, also minimal. Ongoing use requires a modest subscription.

The few other "rollover sensors" we are aware of are either too expensive, non-functional or unavailable to have made any significant impact, including Harrington's own dedicated hardware unit, (which is functional but too expensive for most users).

We are addressing each of these issues to ensure that Rollover! *does* make an impact.

While the app itself won't directly or immediately prevent rollovers or other accidents, it:

- *will* reduce consequential deaths, suffering and economic and social costs
- is the first stage in a series of AI products and services which is designed to reduce accidents in the medium term, by providing driver monitoring, feedback and training based on progressive capture and analysis of data being collected,
- leading to greater vehicle autonomy and safety in the longer term

IT in Quad Bike Safety Strategy

Information technology is given little or no attention in other Australian states' strategies to date.

There are serious question marks against the cost and/or effectiveness of some elements of existing quad bike safety strategies.

This presents an opportunity for Tasmania to do something different and more effective, even on a modest budget.

We submit that some resources should be directed to IT, for example by incentivising:
- the introduction of online components and follow-up to quad bike safety training courses, extending and increasing the impact of short (typically one-day) courses.
- companies and research institutions to collaborate with government agencies to deliver IT-based products, services and programs aimed at quad bike safety
- the use by drivers of IT-based safety aids and tools, especially low cost ones and
- by applying government sector purchasing power to stimulate the uptake of IT-based approaches, say in park rangers' vehicles.

Specific Suggestions

Whilst obviously self-serving, we believe the following suggestions have merit and deserve consideration, aligned as we are to the purpose of the Task Force and the interests of Government on this subject:

- Government departments, particularly Department of Primary Industry, Parks, Water and the Environment, could commit to purchasing subscriptions to the Rollover! app for use by employees in remote locations, at the nominal cost of $70 per user per annum**.

- The Government could provide a subsidy for private sector users to purchase advanced crash detection and alert systems, of up to $70 per user (say)**.

- Government agencies and/or Tasmanian tertiary institutions could be resourced to conduct collaborative testing, analysis and emergency service integration of advanced crash detection and alert systems.

** If administration costs of these small amounts are prohibitive, they can be bulk billed.

Conclusion and Follow-up

Safety in Motion's primary purpose is to reduce the toll of deaths and injuries off road, beginning with the quad bike sector in Australia, and is keen to work with the Government of Tasmania to this end.

We believe that IT and particularly AI has a critical role to play and that there is an opportunity for Tasmania to lead the nation in this area.

Finally, we appreciate the opportunity to make this submission and look forward to further communications with the Task Force and Departments as required.

Murray Hancock, Director

murray@safetyinmotion.com.au

0415 429723

William Harrington, Director

william@safetyinmotion.com.au

0428 418531