REDUCING ROAD TRAFFIC ACCIDENTS AND DEATHS

Situation

The client operates around 100,000 vehicles as part of its global logistics service. They estimated around 20 deaths per year are caused by driver inattention, including tiredness, and that each death has a direct cost of around $5m USD, aside from the emotional impact on the families of those involved. In addition to deaths, there were hundreds of lesser accidents which at times carried a higher direct cost given need to provide 'for life 'support.

Task

An 'innovation discovery' engagement was undertaken to see if technology could be brought to play to reduce this impact.

Action

A wearable 'collar' was identified that could be used to measure attention and warn when levels of inattention were problematical or critical. This included an ability to 'learn' the specific characteristics of the user over a period of time for improved accuracy, gathering various biometrics which were analysed partially on the device and partially on a BlueTooth connected mobile phone. However, there was no external connectivity or transmission of data and as such, it wasn't ready for market.

Over a six-month period, a small UK-based technical team worked with the product owners in Japan to open up the architecture via an API, to develop a device-agnostic mobile application. This was connected to a Microsoft Azure cloud platform for device management and organisation-wide analytics, to generate missing insights into why drivers have accidents. For example, factors such as operator health, vehicle type, route, weather conditions and time of day. The customer was closely involved in helping to define the solution.

Results

A 50 user pilot was rolled out across several European countries. Initial issues with user adoption via a 'train the trainer' approach were resolved and the pilot was deemed a success by the customer, who is currently considering a 5,000-device rollout to further gauge the benefits to the business. This is being provided via a subscription model which includes the device, user enablement, device management and operational analytics dashboards, all wrapped in a service package covering helpdesk, break/fix etc.