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How one company is using IVMS to improve driver safety in Australia, are they doing it right? (20 word limit)

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Abstract

By 2019 it is expected that over 8.9 million European commercial vehicles will be fitted with invehicle monitoring systems (IVMS). The usual model for IVMS use within organisations is that it is programmed to measure critical safe driving metrics and providing regular feedback on how staff are driving and what they need to improve on. MiX Telematics has started working with clients on an expanded driver improvement model that focusses on four key areas that influence driver behaviour within an organisation: the employee, the employee's team mates, the employee's supervisor and employer's organisational culture. This expanded model has resulted in our clients achieving a more sustainable safe driving culture.

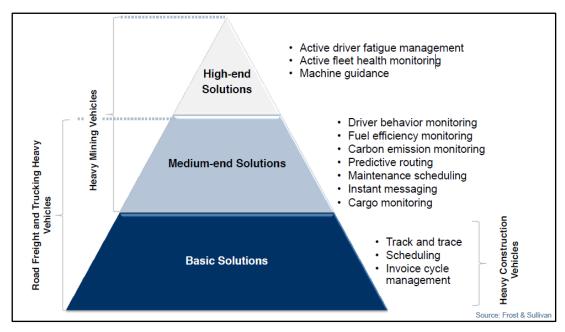
Introduction

Borg Manufacturing is a leading manufacturer of melamine products, operating a fleet of over 200 vehicles, including plantation trucks working on unsealed forestry roads, medium and heavy rigid trucks in suburban and city environs and multi combination (B double) vehicles travelling on national highways and regional single lane roads.

In January 2015 Borg began to roll out IVMS, initially in 20 vehicles, with the goal of reducing the risk of roll-overs within their fleet, meeting Chain of Responsibility obligations and reducing insurance liability.

IVMS Selection

A range of IVMS solutions were available to Borg's, from basic 'plug and play' solutions through to real-time monitoring of driver behaviour, fatigue and engine and performance. Borg selected a solution at the upper medium end of the spectrum shown by Frost & Sullivan.



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The Borg's required a solution that could measure proven leading safety indicators in order to identify at risk drivers and provide opportunities for coaching and improvement. Their requirements included:

- Evidentiary standard driver identification
- Accurate measurement of elevated g-force events (braking and cornering)
- Speed zone geo-fencing for state forest roads and high-risk routes,
- In cab audible alerts to inform drivers when an adverse event had occurred, and
- Forward and in-cab facing cameras that would record adverse events.

The last requirement, initially quite contentious, not only improved driver coaching but has also served to support driver's explanation of on road incidents and had become an invaluable tool for managers and drivers alike.

Supporting Safe Driver Behaviour

As well as supplying the IVMS solution, MiX Telematics also worked with Borg to develop an organisational model would support a change in driving behaviour and the acceptance of IVMS by drivers. This model consisted of:

- An organisational policies and culture that supports safe drivers
- Peer networks that encourage safe driving and discourage dangerous behaviour
- Supervisors who are able to interpret IVMS data, provide meaningful feedback and examples to drivers and an evidence based pathway to improvement, and
- Individual drivers who feel that they have the support and skills to driver in as safe a manner as possible and will be rewarded for their efforts.

This program included an increased headcount in the driver safety team and the daily interrogation of adverse events and corresponding video footage.

Results

In January 2015 IVMS was installed in 20 vehicles and units were programmed not to sound in-cab alerts if an adverse event occurred. During that month Borg vehicles travelled in the region 120,000km, with nearly 15 hours 'over-speed' (in excess of 103km/hr).

In the six months after the activation of in-cab alerts and the implementation of their driver improvement program, Borg's had experienced a reduction of over-speeding to less than four hours for nearly 400,000km travelled!

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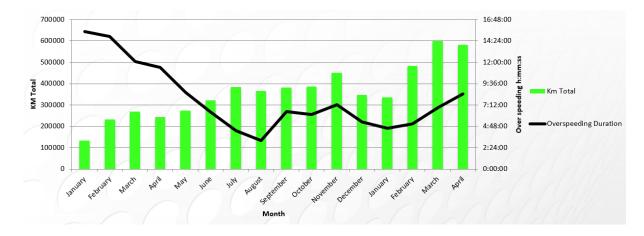


Table 1. Comparison of over-speeding events with kilometers travelled

Conclusion

As Borg's have developed their driver improvement program and increased the number of vehicles in their fleet equipped with IVMS they have continued to see a reduction in their safe driving leading (over-speeding) and lagging (crashes) indicators and are well on their way to achieving their stated goals.

References

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