

# Personalised digital feedback for company car drivers could significantly reduce carbon emissions

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Providing company car drivers with personalised digital feedback on their driving behaviour can make them safer on the road, finds new research from Vlerick Business School. It also fosters more eco-friendly driving, significantly reducing the carbon emitted from their journeys.

In the global fight against air pollution, a number of large-scale solutions, such as increasing electric vehicles and improving public transport, have all been suggested. However, this research shows that the utilisation of data-driven, personalised driving-style feedback could also be helpful.

The findings come from new research by Frank Goedertier, Professor of Marketing at Vlerick Business School; Bert Weijters, active as a Professor of Psychology at Ghent University and Pieter Vanpaemel, who was active as Vlerick Business School researcher at the time of the data collection.

They collaborated with a banking and insurance company and ran a real-life, large-scale field experiment involving the firm's employee company car drivers. The premise of the research was to understand whether or not providing personalised feedback based on data collected via a digital technology application in the cars (specifically driving data collected via a car dongle) could trigger drivers to drive more eco-friendly (and safer).

To do so, the researchers worked with over 300 employees who drove company cars. A tracked device was fitted to their cars. This device recorded and monitored the driving behaviour of the employees. Information, tips and advice were offered to the drivers, specifically, receiving information comparing their driving behaviour with that of others participating in the experiment.

Next, tips and advice were offered to improve a calculated "eco-score". The researchers studied the drivers over a period of 21 weeks altogether to see if the personalised feedback provided prompted the experiment participants to drive more eco-friendly (and safer).

Eco-driving is a technique that aims to minimise the environmental impact of a vehicle and maximise fuel efficiency. Therefore, the tips the digital device gave were personalised to the driver and included actions such as avoiding harsh braking, accelerating quietly, avoiding idling, driving at a constant and moderate speed, avoiding using the car for short journeys, and checking the weather conditions before driving. The prompts became more detailed after the first 4 weeks and were personalised to the specific driver.

The researchers found that by administering the feedback based on the data collected via the in-car digital device, drivers became more eco-friendly (and safer) in their driving habits. Interestingly however, the researchers also found that the comparative set-ups (in which drivers were compared to other drivers) had no additional impact on making drivers more eco-friendly.

"In the face of escalating environmental challenges, including air pollution and dangerous carbon emissions, policymakers are struggling to identify ways to truly reduce the impact on the climate",

says Professor Goedertier. “Previous studies suggest that eco-driving can reduce fuel consumption by 10%, on average and over time, thereby reducing CO2 emissions from driving by an equivalent percentage. Therefore, encouraging all drivers to do so more economically could have a significant impact, and technology can help nudge those drivers into doing so”.

The researchers suggest that more companies should be looking at implementing technology into their company cars that are able to generate real-life “driving behaviour” feedback. They demonstrate that combining this information with helpful tips on how to drive more ecologically and next collect personalised data on driving behaviour improvements (and share this with drivers) - has an impact. Doing so could be an effective way of not only making the roads much safer for road users but also cutting down on dangerous emissions that cars can cause.

If you would be interested in speaking with the researchers, please contact Peter Remon at BlueSky Education – [peter@bluesky-pr.com](mailto:peter@bluesky-pr.com) +44 (0) 77 235 228 30.