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## **Providing social normative feedback through Green IS to improve corporate car drivers' fuel efficiency**

### **Abstract**

The Green information systems discipline has the potential to support environmental sustainability in corporations by drawing employees' attention to their energy consumption even when financial rewards are not offered. A sample of 240 corporate car drivers from one company were selected for this field test; over a duration of three months their fuel efficiency was calculated using a mobility information system from which additional qualitative data was used to provide a detailed monthly email reflecting customized feedback for each participant. The emails summarized driving related figures such as total km driven per month, CO<sub>2</sub> emissions, and tips to incorporate eco-friendly driving practices. A comparison of their average monthly fuel efficiency rating against that of their colleagues was made and illustrated using either a discrete or continual scale. This provided them with social normative feedback with the desire to explore if this had a greater impact on reducing participants' fuel consumption. Results indicate that descriptive social normative feedback had a significant impact in motivating participants to improve their fuel efficiency, even when no financial rewards are offered. This finding is vital in endorsing the importance of maximizing the potential use of feedback information systems in combination with social normative feedback to promote eco-friendly driving within the corporate driving world. Ultimately, this study reflects the capacity for corporations to reduce their CO<sub>2</sub> footprint and fuel costs by improving their employees' (i.e. car drivers) awareness of fuel consumption using a mobility information system to collect relevant data, which can then be appraised against ecological concepts, and customized feedback sent to each driver via a monthly email. Hence, this optimizes the attributes of Green IS technologies whilst keeping the need for corporate investment to a minimal.

Keywords: Green IT/IS, Ecological driving, Social normative feedback, Feedback technologies, Persuasion, CO<sub>2</sub> reduction concepts in corporations