

Summary of Techpilot Report

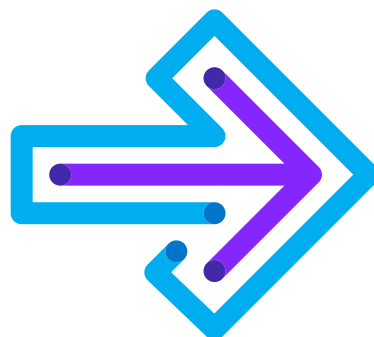
What's telematics and Techpilot?

Telematics, in the automotive world, is the combination of telecommunications and information technology to monitor and assess data related to driving, including the distance, location and time of day of trips, along with driving behaviours, including acceleration, braking, cornering, speeding and distracted driving.

Techpilot was an ICBC-driven study that explored how we could help newer drivers stay safe on the road. It was built in collaboration with Octo, leveraging Octo's mobile insurance telematics offering, Digital Driver™. A total of 2,147 newer drivers consented to using a telematics device in their vehicles, which was then paired to the Techpilot app on their smartphones. The devices and app then gathered data on their driving behaviours while giving feedback to encourage safer driving, through a gamified and incentivised approach.

Quick facts

- Techpilot ran from January 2020 to October 2021.
- All participants had less than five years of driving experience.
- Getting feedback from the Techpilot app helped participants drive safer, but didn't significantly affect how often they got into crashes.
- Participants reported overall positive experiences with using the Techpilot app.



Customer quotes

"I would see how often I would speed, where I would speed, that sort of thing. I noticed patterns of where I would speed, and it was usually on more busy roads, not residential.

It gives you self-awareness, like a cold bucket of water. Hey, here's how you're actually driving, you know, this is not how you should be driving if you want to be a safe driver, right.

And just now, with the app, it's definitely helped me realize (that) I need to be a safer driver, and I need to do better."

"It motivated me to drive well and rewarded me for my efforts to do so. It was also reassuring to have the tips videos for reference and a way to keep track of how I was doing."

"It's been good. I've noticed because it measures so many different things, and there's things on there that it measures that I never really took into consideration, right, like cornering speeds. I always knew that I was in the middle, but I didn't realize that like the G-force on it sometimes is a little more than it should be, so there's that."

"Honestly, the people around me because the app can beep at me all at once but in the end it's the honking that's going to give me anxiety. Like if somebody is genuinely annoyed by my driving, they're going to honk at me and if that happens, I'm going to think, "Okay, well shoot ... I know this is the proper way to do it, but this is the way that it is expected of me". So, like the unwritten rules of the road ended up usually winning out unfortunately."

Goals

- To help newer drivers drive safer and get into fewer crashes
- To learn more about how the incentivised use of telematics, in this case gamification features, can help improve driving behaviours.

Method

We randomly divided our 2,147 drivers into two groups: a control group of 1,073 people and a treatment group of 1,074 people. Everyone was invited to install the devices and app, but only the treatment group received feedback from the app throughout the study. On the other hand, the control group got all of their feedback when the study ended. By doing this, we were able to compare the driving behaviours of those who got feedback throughout the study with those who didn't.

The Techpilot app used gamification features, including driving scores, trip reports, challenges, leaderboards and collectable rewards like gift cards. Short videos and tips on safe driving were also available in the app.

Results

Compared to those who didn't get feedback until the study ended (the control group), those who got feedback throughout (the treatment group) drove safer overall. These improvements were immediate and mostly continued throughout the study, including lower rates of the following risky driving behaviours:

- 11% less rapid acceleration
- 14% less harsh braking
- 8% less speeding

While some participants reported connection issues and other concerns related to the app, they had a positive experience overall and enjoyed getting to improve their driving while earning rewards.

Although the pilot observed a 13% lower crash rate per kilometre driven in the treatment group versus the control group, the sample size was too small to conclude with confidence that telematics were a factor because crashes are relatively infrequent events.

One finding of concern is that participants shared some norms and attitudes about speeding in British Columbia, and the negative impact it had on their own driving habits. They noted the unwritten rule of speeding, its acceptability and the pressure they felt to conform — based on expectations from other drivers and, sometimes, even their own passengers.

By being more mindful and understanding their driving behaviour, they were able to make immediate and sustained improvements.

What's next

The results of this pilot are very encouraging. Based on the results and participants' feedback, we think that telematics shows promise in helping people drive safer. Telematics programs can help make roads safer and put customers more in control of their premiums through usage based insurance products and improved pricing sophistication.

Through customer research, we know that usage-based products such as kilometre-based pricing are valued by our customers. That's why we're exploring options to incrementally deliver usage-based products in the coming years.

As a first step, we're looking at offering additional distance-based discounts starting next year. Since the discounts will be based on kilometers driven in the previous 12 months, we encourage customers to provide their vehicle odometer information when they next renew their insurance.