VicRoads



FASTER TRANSACTIONS CUT TIME, IMPROVE DRIVER EDUCATION

A NEW APPLICATION REDUCES VICROADS INSPECTION TIME BY MORE THAN 60 PER CENT



VicRoads is a government body that plans, develops and manages Victoria's arterial road network, and manages registration and licensing services. One of VicRoad's major objectives is creating a safe road system for all Victorians, with an emphasis on driver education.

With heavy vehicles involved in 18 per cent of road deaths and an increased risk of serious injury to other road users¹, reducing this figure is important. In an effort to educate heavy vehicle drivers and improve road safety, 43 Victorian Transport Safety Services (TSS) officers are charged with ensuring that heavy vehicles comply with relevant laws and regulations.

Using iPad minis and an application (app) called vCOM, officers can now complete checks of heavy vehicles in less than half the time, meaning they have more time to focus on the task of educating drivers about compliance.

CUSTOMER

VicRoads

ndustrv

Transport and Logistics

Technology Partner

Gridstone

Product Name

vCOM

Benefits

- Safer roads
- Faster checks, more checks
- Efficiency gains
- Availability of more information
- Greater data accuracy
- Better customer interactions
- High user acceptance
- Real-time access to data by management

CASE STUDY: MOBILE APPLICATIONS

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Heavy vehicles are subject to strict legal and regulatory requirements, which VicRoads' TSS officers are authorised to enforce. The officers inspect vehicle weight and roadworthiness, check driver behaviour, including fatigue, and look up previous traffic infringements such as speeding fines and failure to wear a seatbelt.

Previously all TSS officers carried a box of paper forms to carry out their inspections. Every form was completed by hand, with one copy handed to the driver and a carbon copy returned to the office, where the handwritten notes were typed into a database.

The inspection process was extremely time-consuming, particularly where multiple infringements required completion of several forms. Each form contained many identical fields — driver's name, address, vehicle type, registration number — so the same information was recorded multiple times across different forms.

If officers wanted to check the background of drivers or vehicles, they had to telephone back to VicRoads or access the laptop in their vehicle.

As a result, complex inspections could take as long as 45 minutes, which was disruptive to the driver's work day.

VCOM LAUNCHES WITH DRAMATIC RESULTS

The process changed significantly when iPad minis equipped with an



application called vCOM, developed by Gridstone, became standard issue for TSS officers. Telstra provides devices, carriage and device management.

TSS officers now use the app to go through the compliance check-in process. The app gathers information about the driver and the vehicle from VicRoads' backend registration and licensing systems, automatically populating relevant fields and confirming licence validity. The app then guides the officer through the inspection and automatically calculates the prescribed weight for that particular vehicle.

The app records the results of the inspections and, depending on those results, issues penalty infringement notices or vehicle defect notices.

Four of nine paper forms were replaced by the app for its initial release, with more forms being added progressively.

The technology rollout has produced enormous benefits for VicRoads and the team of TSS officers.

"vCOM certainly helps in terms of an officer having all of the information available at their fingertips — about the history, about issues that have been identified with a particular driver or vehicle previously — to make better informed decisions about what appropriate action might be required there on the spot. It adds to the intelligence available to the officer in real time."

Marc Paglia, Manager HV Innovation, VicRoads

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FASTER CHECKS, MORE CHECKS

Inspections of vehicles are completed much faster. A more complex interception that might take 45 minutes can now be completed in 10 minutes.

Peter Ervin, Manager TSS Rural, VicRoads, expects to see an increase in the number of vehicles inspected as a result of the rollout. With reporting functionality in development, the exact improvement cannot be measured. Ervin says, "I would be amazed if it's not [improved], especially at weighbridges where we're pushing the trucks through much quicker than before. In the past, officers would get on the phone or fire up the laptop to do a [registration] check. But now they can have the trucks in a line and check them off quickly."



One of the biggest time savings is the process of weighing heavy vehicles. From each axle weight, the app determines if the vehicle is over its prescribed weight. Previously, officers had to calculate manually, recalling the correct prescribed weight for

each different type of vehicle, which was a complex and time-consuming process.

EFFICIENCY GAINS

VicRoads has experienced a significant reduction in administrative tasks. Data automatically uploads from the officers' devices to the database, instead of via manual entry when the officer returns from the field. Photographs of the vehicle and driver are instantly associated with the relevant inspection, so officers no longer have to download images from their mobile phones and attach them to the correct record when they are in the office.

Data from the inspections of each day is displayed in daily records. Where previously these records were checked manually, now an error, such as an incorrect code, can be corrected much faster.

AVAILABILITY OF MORE INFORMATION

Marc Paglia, Manager HV Innovation, VicRoads, says: "vCOM certainly helps in terms of an officer having all of the information available at their fingertips — about the history, about issues that have been identified with a particular driver or vehicle previously — to make better informed decisions about what appropriate action might be required there on the spot. It adds to the intelligence available to the officer in real time."

Officers can view the driver's and vehicle's history in real time, removing the need to call VicRoads or access the laptop. If, for

example, a previously detected defect has not been rectified, the officer can forgo a formal warning and proceed to the next level of response.



The app also includes warnings about particular drivers, alerting officers to approach with caution or that police need to be involved.

A new capability enabled by the app is a record of the vehicle's recent intercept and sighting locations. Officers can use this information to identify potential excessive driving hours by a driver and take action accordingly.

GREATER DATA ACCURACY

Data is instantly uploaded from the officers' devices, removing the need for VicRoads staff to enter data from handwritten forms and reducing the potential for human error. While the prior error rate of 10 per cent was already very low, these errors have been eliminated.

BETTER CUSTOMER INTERACTIONS

Says Paglia, "There are obvious tangible benefits, such as less paperwork, faster processing, better information gathering and improved data accuracy. But there are also intangible benefits that I think are equally important."

One of those intangible benefits was unanticipated and only became evident after the rollout, as Paglia explains:

"Our heavy vehicle road safety strategy is more about ensuring compliance with the law rather than one of enforcement. It's more about educating the industry and having the industry choose to comply. And



CASE STUDY: MOBILE APPLICATIONS

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making it easier for them to comply, so that it's their choice to comply rather than receiving lots of fines."

"The new system gives officers more opportunity to have better conversations with drivers, rather than being bogged down in the paperwork. They're getting through the process much faster, and drivers are not being held up for as long. They aren't handing out a piece of paper on the spot, so there isn't that annoyance. It's a more positive experience, which is intangible but important. Officers enjoy the work more too. They can focus more on the educational piece, and point drivers to information about how to comply in future."

REAL TIME ACCESS TO DATA BY MANAGEMENT

Data from each interception is automatically and instantaneously uploaded to the vCOM portal. If a heavy vehicle driver calls VicRoads to contest or complain about an interception, managers can view all the relevant facts and photos in the database to respond appropriately, instead of telephoning the officer for details.

HIGH USER ACCEPTANCE

According to Ervin, he has never seen a new change so readily accepted, even though "most people are resistant to change. We have guys who have been doing the job since the 1970s, but every single one of them loved it. Take-up has been really good and they are really keen".

Finally, Paglia talked about the positive experience of working with Gridstone:

"Gridstone was very good: it's a very responsive development company. The vCOM product is a reuse of the Gridstone mPol platform, which was deployed for Queensland Police as its product called QLiTE. It was the preferred option on the basis that we could reuse the platform and build on what was already developed. We did have to develop some extra functionality because the heavy vehicle interception processes are unique and different to general policing. We developed specific modules and we worked very closely with Gridstone, which went well."

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