

LEGISLATIVE COUNCIL ECONOMY AND INFRASTRUCTURE COMMITTEE

Inquiry into the Increase in Victoria's Road Toll

Melbourne—Tuesday, 6 October 2020

(via videoconference)

MEMBERS

Mr Enver Erdogan—Chair

Mrs Bev McArthur

Mr Bernie Finn—Deputy Chair

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Mr Lee Tarlamis

Mr Mark Gepp

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Mr David Limbrick

Ms Melina Bath

Mr Andy Meddick

Dr Catherine Cumming

Mr Craig Ondarchie

Mr David Davis

Mr Gordon Rich-Phillips

WITNESSES

Mr Miguel Nasr, Chief Product and Data Officer, and

Mr Shaun Gray, Strategic Account Manager, Vault IQ.

The CHAIR: I declare open the Economy and Infrastructure Committee's public hearing for the Inquiry into the Increase in Victoria's Road Toll. I welcome any members of the public watching via the live broadcast. I wish to also acknowledge the traditional owners of the land, and I pay my respects to their elders past, present and emerging. My name is Enver Erdogan, and I am Chair of the committee. I would like to also introduce my fellow committee members: the Deputy Chair, Mr Bernie Finn; Mr Lee Tarlamis; Mr Andy Meddick; Mr Mark Gepp; and Mr Rod Barton.

To all witnesses, all evidence taken at this hearing is protected by parliamentary privilege as provided by the *Constitution Act 1975* and subject to the provisions of the Legislative Council standing orders. Therefore the information you provide during this hearing is protected by law. However, any comment repeated outside the hearing may not be protected. Any deliberately false evidence or misleading of the committee may be considered a contempt of Parliament. All evidence is being recorded. You will be provided with a proof version of the transcript following the hearing. Transcripts will ultimately be made public and posted on the committee's website.

We welcome any opening comments, but I ask that they be kept to a maximum of 5 to 10 minutes to allow plenty of time for discussion. Can I please remind members and witnesses to mute their microphones when not speaking to minimise any interference. If you have any technical difficulties at any stage, please disconnect and contact the committee staff using the contacts you have been provided. Could you please begin by stating your name for the benefit of our Hansard team and then start the presentation. We also have Mrs Beverley McArthur online, who is a fellow committee member.

Mr NASR: Thank you, Enver, and committee members. I am going to share the presentation on my screen. Please give me a thumbs up once you confirm you can see it.

Mr GRAY: Just while Miguel is doing that, I am the national Strategic Account Manager for Vault. Miguel is the product owner. We are both very passionate about this area, so we really appreciate the opportunity to present to you.

The CHAIR: I should just outline to the committee that Vault IQ is an ASX-listed company, multinational also, based, I believe, in New Zealand and Australia and South-East Asia too. I guess both of you can speak to that. They have got some products that they believe may assist us. I will go back onto mute and you can begin your presentation.

Visual presentation.

Mr NASR: Excellent. Thank you. Let me go into presentation mode and share my screen. Hopefully you can see the presentation. Thank you again for your time today. We have done the intro, so I will jump straight into the next slide.

Vault recognises that distracted driving is the leading cause of unintentional accidents worldwide. We look after business customers who have medium to large fleets, and we observe this with pretty much all of our customers. We are very supportive of the measures being taken by the Victorian government to improve road safety and reduce road toll. We are also very committed to the development of accessible safety technology. Now, consistent with our submission, we want to highlight some of the key challenges associated with existing solutions and programs and share what we have been doing and some of the successes that we have observed in the hope that it creates an opportunity to work collaboratively with the Victorian government and industry to achieve material reductions in vehicle accidents and deaths on the road.

Let's start with the first areas that we looked at with existing solutions. Some of the issues are that they are either too expensive or not compatible or practical for the masses, and none are very scalable. They range from—and we see this—clients upgrading their vehicles to take advantage of new safety features, or they

retrofit their vehicles with expensive equipment and solutions. Then we look at driver training courses, which are fantastic but are not very scalable, and the logistics of them also makes them not very accessible to a lot of our clients.

When we set out to solve this problem, we set out our big, very, very hairy, audacious goal of really addressing the accessibility and affordability of driver safety solutions in the market. So that was the North Star for us as we looked into this problem a bit deeper.

The other area we look at as an incentive strategy for driver safety—we look at it and we characterise it into the carrot or the stick. As it relates to the stick, we look at fines and disciplinary actions. They can be effective when you look at disciplinary action in the short term, but they may only work for a proportion of drivers. We see this time and again in the media and reports and studies that show that it does not actually result in sustainable changes. Rewards, on the other hand, do provide more sustainable improvements in changing driver behaviour. However, the sustainability of these programs is really dependent on the commercial model that underpins the reward subsidy—so who is paying for these rewards? The other problem is that they can lead to inappropriate behaviours, rule breaking and other issues.

Again, looking at our big, hairy, audacious goal, we looked at a solution that could achieve sustainable changes in driver behaviour improvement and reduction in distracted driving, but it also has to be at low cost to address that accessibility objective also. So we have spent the last two years building out our SoloDrive solution, and really the key driver for us in the Solo solution is that we want to really democratise driver safety by making it accessible and affordable to as many people as possible. That was our number one goal. Our whole philosophy around this solution is to empower drivers with behavioural awareness and insights to really help them understand the risky activities that are taking place in their day-to-day driving in the hope—and this was the hypothesis from the get-go—that by playing back and giving them feedback they would self-correct and self-manage their own driving behaviour. We believe that education is a lot more impactful and sustainable than the carrot or the stick for that sustainable driver behaviour change.

A little bit about the SoloDrive solution that we have built: it is a smartphone application that can be easily installed into a smartphone. The solution is compatible with over 95 per cent of smartphones in the market, and that number will only increase as new models get adopted. The solution provides drivers with an immediate scorecard at the end of every drive. After installing, the solution runs in the background, and after every drive the driver gets a scorecard. It gives them a score. It also gives them information about their risky driving behaviours during that trip that ultimately explains the score they got. In terms of the risky driving behaviour, I will talk a bit about that shortly, but in addition to that it provides them with a report card so that they can assess and track their changes over time—whether they are improving or not. They can drill down into the risky activities and get that finer level of granularity and understand which risky behaviours are of most concern for that driver.

We have also built a leaderboard to gamify the experience, that we are about to start trialling with some clients. We are not sure yet whether that is going to actually help or hinder, but we are going to be testing that shortly with some clients. In terms of risky driving behaviour that we are able to detect, the solution runs on the smartphone, as I explained earlier, and it is essentially leveraging all of the sensor data in your smartphone to make inferences about speeding events, rapid acceleration, hard braking and hard cornering, but more importantly we are able to also detect whether the driver is actually handling their phone whilst driving. We can do this because the solution is built onto the smartphone, as compared to a lot of solutions that we see in the market which use a hardware that needs to be installed into the vehicle and that does not provide that visibility to the driver.

Now, in the context of a consumer offering it is important to call out that this is not a solution to really monitor that driver for a third party to monitor and take action. We see this really as a solution for the driver to play back their performance and help them improve in their driving. We have been doing this now for about two years, and we want to share some of the results that we have observed both internally within our own fleet and with some of our clients. This chart is a pretty typical graph that shows the driving score of a driver. After the first 20 trips we typically see a spike in improvement. Now, we would contest that that is the power of awareness. By simply making the driver aware of their risky driving behaviours and where they take place drivers are able to make their own decisions to impact and improve their driving. So what we typically see is after 20 trips we see a spike and then we see a gradual improvement in their driving behaviour over time, and

that for us is a really positive outcome. In this chart we are talking about 100 trips, and even after 100 trips we still continue to see improvements. There are always opportunities to continue to improve that, and so beyond those first 20 trips there are opportunities for targeted driver training based on the areas that that driver needs more support with.

The next charts show just a couple of the risky driving behaviours. The first one is around phone use whilst driving.

Again, a very similar story: we see a downward spike in the use of phone whilst driving and then a continued gradual improvement at that. The next one is about speeding.

So there are really encouraging results that we have been able to observe with individual drivers. That really gives us some confidence that this is a really innovative way of looking at solving the problem—by educating and empowering drivers with the data about their own behaviours. The charts that I have just shown you relate to one specific driver that we would say is pretty typical. The next chart shows what it looks like for a fleet. So this is a combination of drivers of all sorts of capabilities, and again it is really encouraging to see that—this is 20 drivers—we still see a continued gradual improvement. In the last few months we interestingly saw a dip in the driving score, and we believe—we are doing some research on this—it is as a result of COVID-19. Drivers are not driving as much and so that continued feedback loop is not there. The road conditions in terms of other drivers are very different. And so we were not expecting this but we are not surprised that we see a dip in the driving behaviour. We see some articles that also talk about that reduction in driver scores as a result of some risky activity taking place as people start to get back on the road.

The last slide is a case study video, which I will not play just because of time, but I would encourage you all to watch this after the presentation if you can. ADT Security is one of our clients that has been using the product. They started to trial this with a specific team in their organisation. They have recently made a decision to roll this out to their entire organisation across Australia and New Zealand because of the results of the trial that they did. I will stop there and open up for the question time.

The CHAIR: Thank you, Miguel, for that presentation. It was interesting to see your data-driven insight into behavioural change and road safety. I might actually take the first question myself and then I will pass to our Deputy Chair for the next question. Your submission talks about how the Victorian government can support your application. Can you elaborate on what forms of support the Victorian government might take and how more broadly a partnership between VaultIQ and the Victorian government would ideally be structured?

Mr NASR: Sure. I will start, and then, Shaun, if you want to jump in as well. So one area that we have really focused on is—this is a solution that has absolutely been proven with our own organisation and with some of our clients—we would like to pursue a more detailed study in conjunction with the Victorian government and a local university on a much larger scale to actually look at the data in a lot more detail, with a much greater sample, with drivers of all segments in terms of age groups. Whilst our focus has been on business, we want to absolutely take this to the consumer and look at the masses. We are already engaged with RMIT University on other studies around safety. This is another area that we are absolutely bullish about—the impact—and would encourage the Victorian government's support with that.

The CHAIR: Thank you, Miguel. I would like to pass over to our Deputy Chair for the second question.

Mr FINN: Thank you, Mr Chairman—and thank you for pinching my question. Very good of you! I am very interested in what you are putting forward and I am very excited in fact by what you are putting forward, but there are a number of drivers out there who just do not care. They do not care if they speed, they do not care if they use their phones, they do not care if they use their indicator, they do not care how they drive. How do you get the message to them that this is actually going to help them, much less get them to use it?

Mr NASR: Yes. It is a great question. So we do not contend that this is the end-all and be-all of solutions; right? So we look at this solution as part of a broader set of strategies; right? So, you know, the fines and the rewards are still relevant. We think that this can play a really important role in helping drivers become more aware. With all of our trials the common feedback that we hear from drivers is, 'I wasn't aware that I use my phone that much whilst driving'; 'I wasn't aware of my hard cornering'. What we typically see is an improvement over time. Now, the magnitude of that improvement will absolutely vary from driver to driver,

but we can test that. Simply being aware plants that seed in the driver's mind that next time they think twice. I would probably stop there. This is not a silver bullet, but we absolutely believe in the application of it.

Mr FINN: Thank you.

The CHAIR: I am going to pass over to Mr Gepp and then to Mr Barton.

Mr GEPP: Thank you, Chair, and thanks, Miguel and Shaun, for the presentation. It is exciting when you get a piece of new technology on the market, even if it is in the embryonic stages, to think about how it might assist.

I take from your presentation that there is significantly more uptake in other parts of the world than right here in Victoria and indeed Australia, so I am interested in you taking us through that. Also can you just explain: so, you know, I have downloaded the app; it is on the phone; I assume that I still then, when I get into a vehicle, have to do something, because if there is no link to the vehicle, then how does the app know to start the driving voyage that I am about to commence and compile all of the data? That is number one.

Number two is: what is the privacy aspect that sits behind the data? Because I imagine from any number of different marketing perspectives the information about where I have gone, when I have gone, et cetera, would be extraordinarily valuable information that people would pay a lot of money for. So I am just interested in a couple of those aspects, please.

Mr NASR: There are a few in there, so pull me up if I have missed anything. So in terms of the global landscape, this sort of technology just was not available or reliable enough even three years ago, and I have been looking at this for well over five years. Up until two or three years ago hardware solutions needed to be installed in vehicles for it to really be reliable. Smartphone capability is now such where this is now a reality, and the algorithms that have been built are pretty accurate. So the technology that we have got here—what sits behind it is about 200 billion kilometres of data that has been used to create these insights. So globally the adoption rate is increasing, I would say, exponentially. I do not have the data here, but what we are seeing is that globally in the US and European markets telcos are installing and offering these types of solutions to their clients.

In terms of the security aspects of it, this is up for the design. At the moment when we look at a fleet for an organisation, if the organisation wants to get access to that data so they can make decisions about training courses to roll out and coaching for their drivers, they have a duty of care, a chain of responsibility to do that. When we are looking at the consumer market and making this as a tool for the driver, where that data is stored or shared is something that we would design for the market, but we would say that this should be something for the driver and no-one else. This is not the sort of data you would want to make available to police authorities, for example, because there would be concern there for the driver—for the target market—around that. So we would say that this is a solution where the data needs to absolutely be stored locally in Australia—like, high security—and only the driver has access to their own driving data.

Mr GEPP: And just that other point: so if I have got it downloaded on the phone, when I get into the vehicle do I have to activate the app for it to then record the information?

Mr NASR: That is another one that we have control over. So we would recommend that this is an application that runs all the time, and once the phone detects that you are driving it starts listening to the sensors. So that is one approach which we would recommend. It does not consume any—

Mr GEPP: How does it know that I am driving though and I am not a passenger in a vehicle?

Mr NASR: So the way it would work is you install the app. Once it detects that you are being driven or are driving it will start to record the trip. And at the end of the drive it gives you a scorecard and says, 'Hey, were you the driver or the passenger?', and you can select whether you were the driver or the passenger. Now, for the driver, it is in their best interests to find out the score, and they will only get a score if they are a driver—if they select themselves as a driver—and they will get the insights as well. Once the app is installed—and we have already set up the solution—and they have logged in, that is it. There is no need for any other equipment. There is no need for really any training. The app sort of works in the background and presents you with scores and your scorecard thereafter.

The CHAIR: I will go to Mr Barton then Mr Meddick.

Mr BARTON: Thank you, guys. Couple of concerns: I see this as for people who want to be a better driver, and I think that is the first hurdle because most people think they are good drivers to start with—and that is not necessarily the case. I am also aware in the trucking industry, this technology—one of the largest fleet operators in Australia has exactly this stuff. They know when their trucks are breaking the speed limit. They know which route they have taken. They know all this; they know all this information. I am just wondering how self-policing this would be for people. I can see some value if I owned 50 taxis and I want to know what their drivers are up to—which we should know. This would be a thing we could do with there. But then again, I am concerned that unless it is built into the system, how do you manage that fleet? They are my concerns.

Mr NASR: Sean comes from a transport logistics base, and so I am going to ask him to answer that question.

Mr GRAY: I was politely not saying anything, but I am happy to take this on, Miguel. I have been in telematics and road safety for about 18 years myself. I see telematics as more of a reactive stick, as we call it, and that has been probably one of the driving factors for us in terms of how we engage or work with users. The mandatory approach which telematics uses is something that we are considering as well. Miguel has not touched on it, but in terms of that question about whether you are the driver or not, one of the options that we are looking at is you would have to nominate a driver if it is not yourself. So you cannot just nominate that you were not the driver, and that defaults it a way, and that is one of the things that, from a telematics point of view, then you can report on them and so can we.

So we see that as a really important piece. But the other part with vehicle telematics is who can afford it, which we touched on earlier. So it is okay to put this vast amount of technology in a vehicle—the average amount is around \$20 000, which a lot of the bigger players are doing—through to putting in devices that can be pulled out of a vehicle, with bluetooth capabilities. And so this is where we think that having it on a smart device that runs in the background—there is no ability for a user to impact or hamper that result—allows the process to occur. Then the significance of how we then address the behaviour with drivers, or behaviours in a group or in a collective sense, becomes just as important. Because you can tell someone they are a bad driver, but you can also tell them they are a good driver in these areas but can improve in those areas. I have seen it happen in telematics where drivers have left because of the Big Brother theory versus ‘we are here to help’.

Mr NASR: Yes. I was just going to add to your earlier question, Rod, in terms of the adoption—who is going to adopt this. People who think that they are a good driver probably do not want to know about it. We need to think about how you take something like this to market, and so one of the areas that we are really interested in is in the early stage of a driver’s career—learner drivers, probationary drivers. We think that this is something that could be a really important add-on to their program and something that could continue beyond that. So think about this as the sort of Fitbit for your driving behaviour, right? So you know how many steps and you know your health, but for your driving behaviour, beyond driving school, where you are taught how to drive, there is really nothing that happens thereafter to consistently give you feedback on whether you are doing the right things or not.

If you can get in early at the learner driver perspective, probationary drivers, then hopefully there is a chance that they will continue to use a solution like this to continue to improve. Like I said earlier, this is not the magic bullet, but we absolutely believe that there is a place for solutions like this in helping to continuously give drivers feedback on their behaviours.

Mr BARTON: Thank you.

The CHAIR: I will pass over to Mr Meddick.

Mr MEDDICK: Thank you, Chair, and thank you, gentlemen, for your presentation. My questions—I only have a couple. Forgive me if you have already covered this, but you mentioned before that you are looking at perhaps partnering up with one of the universities to undertake this study. Universities these days, like everybody else, are under enormous financial pressure. How much do you see the university perhaps having to submit out of its own funds in order to partner up with you, and how much would you be willing to participate in that area, or are you seeing this as a completely government-funded study that then the university and yourselves can take on? And then moving outside of that, let us say, all things being equal, the study turns up

that it has been fantastic and it has recommended that this goes into the marketplace—what sort of cost to the consumer? Is this going to be a sellable app that you have to buy through the app store, and if it is, what sort of cost are you talking about? But if it is a free app—nothing comes for free in these marketplaces; someone is paying for it somewhere—is it government that you expect to subsidise that program to go out?

Mr GRAY: I will probably answer the first part, Miguel, and you can handle the product side. Andy, with our current safety study around slips, trips and falls with RMIT, Vault are actually fully funding that. The reason for that is that we are not the experts. Similar to this, we are not the experts in data analysis, and RMIT have four global professors who specialise in slips, trips and falls, so that is why they were the choice. Our part is the data capture, similar to this. So we had no hesitation to help fund that, because we have got a significant number of customers across Australia, New Zealand and Singapore, or Asia, right now that have a problem with prevention around causation, and we cannot answer that for them, but we can help improve it. It being a \$60 billion problem in Australia, we would like to think that if we can reduce that by 1 per cent it is worth more than the cost of funding RMIT and helping the industry. So that is where we see that awareness piece.

When it comes to this study, again it would be a collaborative approach. So whatever is required, we would work through that and make the right choice in terms of whether that is partly funded by RMIT or us or whoever, or yourself, but I think that would be a mutual conversation that we would have as a collective to make that right call. Obviously with the ethics process that universities go through, I can tell you firsthand it took me nearly seven months to get the current study sorted. There are a lot of questions and there is a lot of information you need to prepare, and I think that is how we get to that point.

Miguel, I will hand over to you to talk about the economics.

Mr NASR: There needs to be a business case to make this work, Andy, and so we would not see this as being a free app. There needs to be value associated with it. I actually do not have the answer for how this is going to sort of play out in the market. I think this is something that we would like to work on with industry and with government to get to that point. Whether it is fully user funded or whether it is subsidised by government, we would absolutely be going into this with the view that we would take care of all the development aspects of creating something that is fit for purpose for the consumer market, for example. That is our sort of expertise and that is where we think we can add most value. But taking this then to market, I think there needs to be absolutely some thought put into how do you take this to market, how do you market this to drivers and the commercial model for it.

At a business and enterprise level, this is paid by the organisation because they see the benefits associated with a solution like this in helping to reduce vehicle maintenance, insurance costs—obviously premium drop—and wear and tear of their vehicles. So the business case for them stacks up really well. Without throwing numbers at this, we would see this being the cost of a cup of coffee a month. That is the sort of cost that we are looking at for a solution like this, when we are looking at it at scale. So it is not a huge subsidy to solve, whether it is paid for by the driver, their parents or government or a combination. I think there is a bit of research that needs to go into determining what is the right model for that, but we would hope that that is not a sticking point that would stop something like this from being discovered out in the market, because we are really excited about the impact that it could have.

Mr MEDDICK: It could even potentially, then, be part of the RMIT study.

Mr NASR: Yes, absolutely.

Mr MEDDICK: Okay. Great. Thanks very much for that. Cheers.

The CHAIR: Thank you. I notice that a couple of the committee members have not had a chance. We are a bit short on time. If the other committee members have a pressing question—otherwise we could probably send questions by email. Bev?

Mrs McARTHUR: I am fine, Chair.

Mr TARLAMIS: Yes, I am fine. I can send it, a follow-up question, by email.

The CHAIR: Thank you. If the committee members have a few more questions, is that okay if we email you, Miguel and Shaun, or if they have got any follow-up questions? But I have noticed that we have come to the end of our time for this session, as we have got another witness. On behalf of the committee I would just like to say thank you to both of you and to Vault IQ for your submission and contribution to this hearing. It is great to get your insight and to see that there are ASX-listed companies that are offering market-based solutions to this broader problem of road safety. I guess as a committee it is something for us to consider, and I really do appreciate you answering all our questions as best as possible. Thank you very much.

Mr NASR: Thank you.

Mr GRAY: Thanks, guys.

The CHAIR: Thanks, Shaun. Thank you, Miguel. The committee will now take a short break before our next witness.

Witnesses withdrew.