

Changing Driver Behaviour

Can UBI Deliver?

April, 2014

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Changing Driver Behaviour – Can UBI Deliver?

Clearly audible amid the buzz surrounding UBI in Canada is the expectation that it will be effective in changing driver behaviour, i.e., it will help drivers improve their skills. This is exciting because a corollary of improved skill is reduced loss costs making changing driver behaviour an important selling point for insurers contemplating a push into UBI.

During a recent webinar a case was presented that examined data collected from three drivers whose performance was nominally similar but whose skills, on closer examination, differed considerably. The key takeaway being that the granularity of telematics data and the application of powerful analytical tools make it possible to identify these differences and leverage them to predict losses and properly price risk.

Research has consistently shown that when presented with the concept of UBI and the idea that adopting it could yield them a monetary benefit with no downside risk, many drivers express interest in the product. Interest is typically reported as ranging from one to two thirds of respondents with the top third very interested and the bottom third not at all. Half or more of those drivers who are very interested in UBI are also reported to be willing to change their behaviour.

The apparent alignment between what the technology can deliver and emerging consumer acceptance, even preference, seems very promising. But, perhaps there's cause for gentle application of the brakes on the 'changing driver behaviour' bandwagon, at least with respect to programs that seek to attract the soft target of cautious, identifiably low-risk, drivers. There are a number of reasons this might be prudent.

UBI programs famously produce oceans of data that hold the key to unlocking the secrets of drivers' real-world performance. Pioneer in the field, *Progressive Insurance* first offered a UBI product, *Autograph*, in 1999 and has successively refined its offering through several iterations, *Tripsense*, *MyRate*, and currently, *Snapshot*. Over time, *Progressive* has gathered data from more than one million cars and over nine billion miles, or fourteen and a half billion kilometres, of driving.

Progressive has deployed a range of devices with various data-gathering capabilities including some with accelerometers and GPS. The current *Snapshot* device, which plugs into the OBDII port in most vehicles, only measures time and speed. The gathered data, sent via cellular call at the end of each trip, is used to identify distance driven, time of day and hard braking events. Some devices include GPS capability but the location data generated is used for research purposes only. Drivers keep the device in their cars for just six months, enough time to calculate a renewal discount, after which it is returned to *Progressive*.

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Why has the company with the most experience gathering and analyzing multi-dimensional UBI data chosen to limit the number of data points it uses to assess policyholders' driving performance? This may be somewhat speculative, but *Progressive's* actions do seem to suggest that it believes driver behaviour doesn't change much over time, even in the presence of an electronic observer, and the lower cost of its approach more than offsets any deficiencies arising from a lack of precision.

This doesn't preclude the company shifting its position in the future. It may have no choice if UBI becomes the dominant model in the marketplace and using more data and more complex models

become necessary to maintain rating competitiveness. Still, with current UBI penetration of the US market estimated to be around 2%-5%, that scenario is probably some way into the future and *Progressive's* simple, low cost model gives them a competitive edge now.

The number of vehicles being monitored by the handful of UBI programs in market in Canada today is in the tens of thousands and the relatively short time these programs have existed mean that any real understanding of driver behaviour and its impact on loss costs is limited. It's interesting to note the differences in the thresholds for different parameters that exist between carriers. The recently launched *en-route Auto Program* from *Co-operators Insurance* sets a qualifying driven distance of <8,000 kilometres for a discount of up to 10% while *Desjardins' ajusto* sets the threshold at <15,000 kilometres.

Similarly, the high-risk times of day differ between the two programs. For *en-route*, driving between 1:00 am and 5:00 am is considered more risky, while *ajusto* customers need to clear off the roads by 10:00 pm if they want to maximize the available discount. These differences imply a degree of uncertainty about what constitutes desirable behaviour and to what degree drivers might be willing to change. Trying to push behaviour change at this stage may be premature.

Another consideration is inherent sample bias. The programs being launched today are generally designed to attract a particular sub-set of the driving population. The appeal for insurers at this early point of entry is the prospect of acquiring new low-risk policyholders. Drivers who don't drive much, seldom late at night and who are not, as defined by the programs, 'aggressive' stand to benefit. If you fit, or nearly fit, the parameters and can reasonably expect to get a material discount with only slight adjustment to how, when, or how often you drive then the value proposition will resonate and you'll be inclined to purchase.

It's hard to know exactly how large this group is, but it's certain that another significant proportion of the driving population is a poor fit, if only because of the distance they drive in a given year. It's also reasonable to assume that there are large numbers of skilled drivers with few or no claims who will not find these programs particularly attractive. For example, people who commute long distances, who work shifts and often drive late at night, or who drive in congested areas where sharp braking is sometimes hard to avoid. Their driving behaviour will be a smaller proportion of the measured whole but is just as important for developing a complete understanding of what constitutes 'good' driving.

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A model built using only data from a sub-set of the population will not be as robust as one that uses a more representative sample. It's hard to imagine that UBI won't one day be the principal means for calculating risk in auto insurance. Entry might be made simpler by focusing on a particular group of drivers, but doing so might make full-scale application a more protracted process than it needs to be.

Driving is a complex task and the range of skill that people bring to the task is wide. If a program is successful in modifying behaviour, perhaps reducing the number of harsh braking events, can it be comfortably said that the driver in question is now a 'better driver' and will the effect be permanent? Being able to see your monthly driving stats is something new but will the novelty wear off? Although programs promise discounts of up to 25%, the average is probably half to two-thirds of that. That's a meaningful reward but a small fraction of total vehicle ownership and operating costs. Over time, will interest wane and the effort/reward equation lose some of its lustre?

People's intentions and actual results can often be quite divergent, even in the presence of substantial incentives. A lot of gym memberships with a January 2nd anniversary date have

proved to be a singular waste of money. An offer to change your behaviour may also not be that compelling a value proposition. Just as laying on the couch eating potato chips might be more appealing than a spin class, maintaining your comfortable driving habits may be less stressful than worrying about how many hard brake events you had this month. Although the research shows both an interest in UBI and a willingness to change behaviour, that willingness could evaporate pretty rapidly. In most instances, changing driver behaviour should perhaps be viewed as a peripheral benefit rather than a program objective or selling point.

It's probably overly hopeful to expect that a newly launched program tracking the same dimensions of driver behaviour that Progressive has distilled its UBI product down to will have greater success in modifying participant habits than Progressive has experienced with more than a decade's worth of program development. Particularly when the leverage available from incentives is constrained as it is in Ontario and many other jurisdictions where insurers can only discount premium and not surcharge and where the benefit is only realized once a year at renewal.

Contrast the almost generic UBI programs available in many markets with the *Mobiliz* program from *Industrial Alliance* in Quebec. *Mobiliz* is very pointedly focused on driving behaviour and tracks five factors – distance driven, speeding, harsh braking, harsh acceleration, and time of day – to determine whether a driver will receive a discount or be surcharged. The program is billed monthly, provides policyholders with a portal to track their progress, but also proactively alerts policyholders to their performance with weekly email reports. *Mobiliz targets* a particular group, young drivers, who have traditionally registered a disproportionate number of claims and paid high premiums as a consequence and who therefore stand to benefit the most from improving their driving habits.

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(positive or negative), all contribute to focusing participants’ attention on the desired outcome – a sustained change in their driving behaviour. As a result, *Industrial Alliance* suggests it has seen a measurable reduction in claims frequency during the limited time the program has been in place.

UBI is in its infancy in Canada and much remains to be learned. Improving driver skill and road safety generally are laudable goals but perhaps for now should be treated as peripheral benefits rather than as program objectives or key selling points. UBI has massive potential to reshape the auto insurance landscape but it needs broad application to do so and narrowly delivering its benefit to an already low-risk group under the guise of improving driver behaviour will not adequately leverage its potential.