

Jim's Perspective...

Telematics and Insurance

It seems like only yesterday when auto insurance rate factors were simple and their application to an individual driver made sense to most insurance consumers. If you had traffic violations which showed up on your MVR, you would likely pay more. If you were in various at-fault auto accidents this too could raise your premium payment. Teenage drivers generally paid a higher rate. After all, many teenage drivers may not have fully developed the executive function of the brain and were, therefore, more prone to reckless driving. Vehicle type and location also logically affected the price paid for auto insurance.

Then, suddenly, in 1989, the credit score was developed by Fair Isaac Company (now called FICO). Bill Fair was an engineer and Earl Isaac was a mathematician. It was initially used by banks, but by the mid 1990's it expanded to insurance rating for auto and homeowners insurance. Back then, consumer advocate groups howled in opposition to the use of credit scores in insurance. They complained that these scores obviously discriminate against poor people. Fair Isaac explained that the credit score relates to how a person manages their credit. There are many poor people than manage their credit very well, and there are rich people that do not manage their credit very well at all. In addition, it was shown that if credit scores were not a part of the rate-making process, on average, a majority of people in any state would pay more for auto and homeowners insurance. This quieted the politicians. However, it was recently reported on the CPCU web site that Washington State's Insurance Commissioner, Mike Kreidler, is calling on the insurance industry to "end its unfair and discriminatory practice of using credit scoring in auto insurance and other lines of insurance. The use of credit scores is discriminatory and unjustly targets people of color, those with lower incomes and individuals and businesses struggling during the coronavirus pandemic." Incidentally, in 2002 the National Conference of Insurance Legislators (NCOIL) developed and adopted a model law to regulate the use of credit scores in personal insurance. In 2003, Nebraska was one of the first states to pass the NCOIL model law (LB487). See 44-7701 et seq. The state of Washington has not adopted the NCOIL model law.

The problem with the credit score and other big data sources that may be used to develop insurance rates, is that the average person cannot figure out how they work and if they are indeed an accurate way to assess risk. People could quickly understand an accident, or traffic ticket, or young teenage driver. People can't assess the correlation between credit and insurance risk.

Today, however, we have moved to a new tool for rating auto insurance consumers. Now you can get a software program from an insurer, for free, install it in your car or perhaps your cell phone, and it will monitor how good of a driver you are. The NAIC refers to this as usage based insurance (UBI) which, as you probably know, is a type of auto insurance that tracks mileage and driving behaviors. UBI is powered by an in-vehicle telecommunication device that is described as telematics technology. Progressive pioneered telematics with its first UBI product TripSense, which was available in 2004. This telematics product morphed into MyRate in 2008, and as shown below, Progressive now uses a telematics product called Snapshot.

Telematics devices measure a number of elements of interest to underwriters: miles driven; time of day; where the vehicle is driven (GPS); rapid acceleration; hard braking; hard cornering; and air bag deployment. The level of data collected reflects the type of telematics technology employed and the policyholders' willingness to share personal data. The insurance company assesses the data and charges insurance premiums accordingly.

The telematics technology used by auto insurers is extensive.

Travelers	Intellidrive
Farmers Insurance Group	Signal Program
State Farm	Drive Safe & Save Program
Amica Mutual	Advantage Points
Allstate	Drivewise Program
Liberty Mutual	Right Track
Progressive	Snapshot
Nationwide	SmartMiles
Geico	DriveEasy

The nation's leading auto insurance comparison web site (this is what the web site asserts), The Zebra, founded in 2012, provides the average discount in each state for an insurance consumer that utilizes a telematics insurance device.

NE	\$35
IA	\$44
KS	\$53
Mass	\$20
Mich	\$96
Wyo	\$0
Colo	\$16

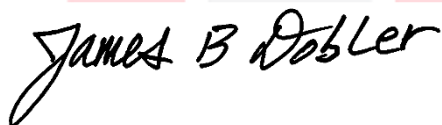
Not sure why Wyoming is \$0. Michigan might be that high because the last time I looked, Michigan had unlimited Personal Injury Protection benefits for auto accident injuries. Also not sure if the dollar amount is based on a policy term of one year or six months.

I suppose telematics might be more favorably looked upon by insurance consumers and consumer advocacy organizations, but from an actuarial standpoint, I am not exactly sure how you can compile three to five years of similar loss data to come up with a rate. The personal driving characteristics of each driver may be a little unique and hard to compare or lump together with other drivers to determine a rate applicable to everyone that uses one of these devices. According to the NAIC, UBI is still only one aspect of the rate charged, and traditional rating factors continue to play a role in what you pay for auto insurance.

According to a New York data analysis company, ABI Research, Global insurance telematics subscriptions were on schedule to exceed 107 million in 2018. This is up from 5.5 million in 2013. It is estimated that UBI premium will exceed 50 billion by 2020.

As I understand it, the insurance telematics products are related to event data recorders and GPS products. Since 2008, every vehicle sold in America has an event data recorder. According to the NAIC, in 2018, roughly 80 percent of new cars were equipped with on-board telematics devices. It has been pointed out by attorneys that parents now use these insurance telematics products to keep track of their kids. It can report whether the child is driving recklessly, whether they are wearing a seat belt and whether they are actually going to the library as they promised. [It would not have worked well for me if my parents had a UBI device in my car during high school and college!] The right to privacy is a highly regarded right in the United States. Whether a lower price for auto insurance is worth the loss of privacy is something I guess each insurance consumer has to analyze. I don't know how willing your clients are to enter the UBI based auto insurance world, but I suspect with time, we will see more of it, at least until most folks are riding in autonomous vehicles!

What underwriter or actuary in 1985 would have predicted that in 2020 insurers would distribute an electronic device that could accurately monitor and report to the insurer the specific driving behaviors of an insured? Any such individual would have been laughed at – made fun of – and told to have a beer and forget about it! I am constantly amazed at the rapid development of technology and the intertwined use of technology in our day to day lives. Today, there are 3.4 billion internet users. Nearly seven hours of footage is uploaded to YouTube each second, in up to 76 different languages. With 1.7 billion active accounts, Facebook is the largest “country” in the world.¹ Indeed, technology is rapidly changing the operation of the insurance industry. It is doing the same thing to society throughout the world – for better or worse.



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Questions or Comments? Please email jbdobler@outlook.com

¹Emerson T Brooking, P.W. Singer, “War Goes Viral. How Social Media Is Being Weaponized,” The Atlantic (November, 2016).