



Attractive UBI Business Models for US Consumers

**The future of auto insurance
will be telematics-based, mobile,
and enriched with services**

Based on the 2020 Future of Insurance Market Survey



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About



Ryan McMahon

Vice President of Insurance
& Government Affairs
rmcmahon@cmtelematics.com
+1 (617) 751-4141

CMT's mission is to make the world's roads and drivers safer. Since its first product launch in 2012 that pioneered mobile Usage-Based Insurance, CMT has become the world's leading telematics and analytics provider for insurers, rideshares, and fleets. CMT's DriveWell platform uses mobile sensing and behavioral science to measure driving risk and incentivize safer driving, while its Claims Studio reduces the claims cycle time with real-time crash detection, crash reconstruction, and damage assessment using telematics and artificial intelligence.

CMT has over 50 active programs with insurers and other partners, improving safety for millions of drivers every day around the world. Started based on research at MIT and backed by the SoftBank Vision Fund to fuel its rapid growth, CMT is headquartered in Cambridge, MA.



Matteo Carbone

Founder & Director,
IoT Insurance Observatory
matteo.carbone@connectedinsuranceobservatory.com
+39 334-6220378
+1 (929) 309-6026

IoT Insurance Observatory is a think tank created and managed by Matteo Carbone, and has aggregated almost 60 organizations between North America and Europe. The members include CMT, six of the top 15 U.S. P&C Insurance Groups and 11 of the top 30 European Insurance Groups. The Observatory vision is that insurance IoT represents a new paradigm for the industry, and the Observatory purpose is to promote IoT adoption in the insurance sector. First and foremost, this think tank is constantly observing and scouting the usage of sensors in different insurance business lines around the globe.

Second, it is interpreting best practices and pitfalls for its members, providing them the most globally relevant IoT insurance knowledge. Finally, it has the core deliverable of the story-telling of this knowledge through workshops and dedicated one-on-ones with each of the organizations which are members of the Observatory. Since its creation, the Observatory has delivered almost 1,600 hours of workshops and 19 plenary symposiums with all the members around the same table.

Preface

THE NEW VALUE PROPOSITION REQUESTED BY CUSTOMERS IS TELEMATICS-BASED, MOBILE, AND ENRICHED WITH SERVICES.

A substantial share of U.S. drivers are ready to switch insurance coverage. **The new value proposition requested by customers is telematics-based, mobile, and enriched with services.** This is one of the key takeaways from a survey done with close to 1,200 U.S. customers by Cambridge Mobile Telematics (CMT) in partnership with the IoT Insurance Observatory in December 2019.

Nothing happens overnight in the insurance sector. It takes many years to see the realization of any market prediction. I've been lucky to work in insurance telematics for long enough to have gained a **historical perspective on its evolution.** The first time I had to deal with an insurance telematics program was in 2007 with AXA Autometrica in Italy. Since then, I have worked on this topic with more than 100 players in 20 markets. Based on what I have learned from the experience of these insurers, I have written dozens of articles and debated at hundreds of conferences around Europe and the U.S.

In all these years, I have come to realize telematics – as any IoT technology – is an enabler of new business processes. It doesn't create value per se. Any insurance telematics program is designed to fail if it is not part of a business strategy and if the definition of this strategy is not **driven by insurance functions.**

At the end of 2014, I published an article that tried, for the first time, to rationalize the different insurance telematics use cases needed to move “from a niche underwriting solution focused on younger and low-mileage drivers to a mainstream solution broadly applied on motor portfolios [1].” That short essay introduced best practices – including **using telematics data to change driving behavior** and improve the **claim management process.**

Yet, convincing insurers has taken time. In September 2016 I had the opportunity to discuss telematics-based claims with the executive telematics team of one of the largest U.S. auto insurers. Their final comment was “we understood how other insurers are using telematics data for claim management, but we are different. We don't need it”. Today, the whole U.S. market, including that insurer, is investing heavily in telematics-based claim management. They are going in the direction that I suggested years ago.

In the following years, I've challenged the status quo of the U.S. auto telematics market trying to provoke 'thinking outside the box.' For example, in the summer of 2017, just as the North American IoT Insurance Observatory opened its doors, I published a paper entitled: "UBI Is a Failure, But Telematics Insurance Is Working Extraordinarily Well [2]."

Throughout this time, I have endeavored to convince U.S. insurance carriers of the telematics approach's real potential, and to **demystify common myths**:

"Customers don't want to share data with insurers."

"There is no ROI on telematics; it is only premium shrinking."

"Telematics is only about how to collect data to find a profitable underwriting formula."

"Converting telematics data into actionable insights is still a wish... insurers are not yet ready to make smart actions."

"It's impossible for an insurer to charge fees to customers for services."

I'm sure all of you are familiar with these suggestions, and have heard them many times in boardrooms and industry conferences.

This report challenges those myths by providing an overview of the state-of-the-art telematics use cases at an international level with a survey designed to verify U.S. customers' interest in these approaches, as well as identifying the urgency in implementing these strategies, especially **in the face of the current pandemic** and subsequent change in driving patterns.

It has been an extremely thought-provoking task to help CMT – one of the members of the IoT Insurance Observatory – shape this survey and interpret its results in order to provide 'down to earth' and actionable insights. I hope you find them useful.



See all sources on page 37



Matteo Carbone

Founder & Director,

IoT Insurance Observatory

matteo.carbone@connectedinsuranceobservatory.com

+39 334-6220378

+1 (929) 309-6026

Executive Summary

THE TELEMATICS MARKET IS READY FOR FULL-SCALE ADOPTION IN THE U.S.

The U.S. auto insurance market has gone through almost two decades of telematics exploration; in that time, the technology's capabilities has gone from nascent to mature and profitable. Today, effective telematics programs offer carriers a substantial competitive advantage over insurers that are not using data to improve safety and pricing. Leading financial analysts have agreed, defining a telematics-driven strategy as an advantage for carriers, yielding more lower crash frequency, severity, and pricing stability. The most advanced carriers have separated themselves by using telematics to improve drivers, attract new business, and substantially improve their retention.

At the same time, technology has taken hold in the public consciousness. In our recent survey, "The Future of Insurance," **63% of the respondents said they would be ready to or consider swapping their current policy for one with a telematics-based premium, and would pay an additional \$5 monthly fee for telematics-based services.**¹

The current market penetration for the U.S. is less than 5%, representing a huge opportunity for insurers to grab market share from competitors that aren't offering telematics-based services to their policyholders.

Even better, "The Future of Insurance" shows that **younger drivers**, the largest generation in the country, **are more excited** about the prospect: 41% of Gen Z respondents said they were ready to make the above switch, as did 38% of Millennials, 35% of Gen X, and 22% of Boomers (which is still four times higher than the current telematics penetration).

So what are the next steps for insurers to take advantage of this trend and become more competitive? This report reveals **insurers have their customers' approval** for more connected insurance services. Building a strategy that will grab the mass market requires the right delivery model, the right mix of services, attractive rewards, and an essential claims framework.

¹ See Methodology on page 36.



US DRIVERS ARE READY TO SWITCH INSURANCE MODELS

With so little telematics penetration and the radical change in driving behavior brought by the lockdown, U.S. insurers have a fantastic opportunity to innovate and bring new product offerings. Price is only one of the elements.

The survey confirmed that the two approaches most widespread in the U.S. market were the most popular with those willing to consider a switch. Both models involve a small discount at signup and a larger price reduction at renewal; one offers cashback rewards for good driving during the first year of adoption, the other higher potential savings overall at renewal. The models obtained more than 50% of the interest of those surveyed, and each received 27% and 26% respectively.

The third option available in the U.S., **Pay Per Mile**, was the least attractive offer due to the absence of an upfront quote and the uncertainty over the final monthly charge. On average, only 9% of the respondents preferred this approach. This model shows slightly higher acceptance (10%) by people in the dense urban settings. The survey was done late last year and there are clear signs that since the COVID-19 lockdown, PAYD is **now recognized as a much more attractive option**.


The survey shows there are great opportunities for new models that are not solely dependent on pricing; despite no pre-seeding in the market, both foreign models scored nearly as high as the two most common in the U.S. The Italian model of a large upfront discount and a rewards-centric model developed by Discovery Insure in South Africa obtained 20% and 17% of the interest of survey respondents, respectively. Investing in these models could revolutionize insurance delivery and accelerate market penetration.

The survey validated **customer availability to pay for services**. This is a key element to build programs with a positive ROI and boost value sharing (discount and cash back) in order to create an attractive value proposition for customers.

Any value-added service (VAS) proposition centered around **safety as a service** was popular with potential U.S. drivers: 71% of the customers who are likely to buy a telematics-based policy with an additional \$5 service fee indicated they **would like to be rewarded for safe driving**. Such rewards are preferably based on the long-term accumulation of points or tokens to be later exchanged for vouchers.

U.S. customers also saw value in an **insurance telematics app that can help them after a crash**: 57% of the respondents that were positive about telematics offers, liked the idea of proactive and automatic assistance in case of a severe crash.

VALUE-ADDED SERVICES WILL BECOME CENTRAL TO FUTURE INSURANCE VALUE PROPOSITIONS



DRIVERS WANT TELEMATICS TO REVOLUTIONIZE CLAIMS

52% of respondents would appreciate help with the claims process leveraging the telematics data, and 48% asked for a **certified report in case of a crash** that could be used in the claims process.

Certified crash reports were the most relevant among the over-54 (chosen by 60%) together with **stolen vehicle recovery** and **weather information**. Millennials and Gen Z valued **fuel efficiency and pollution reduction recommendations** as well as **car maintenance reminders**. Across all ages, 52% of U.S. customers were interested in a functionality that **finds where their car is parked**.

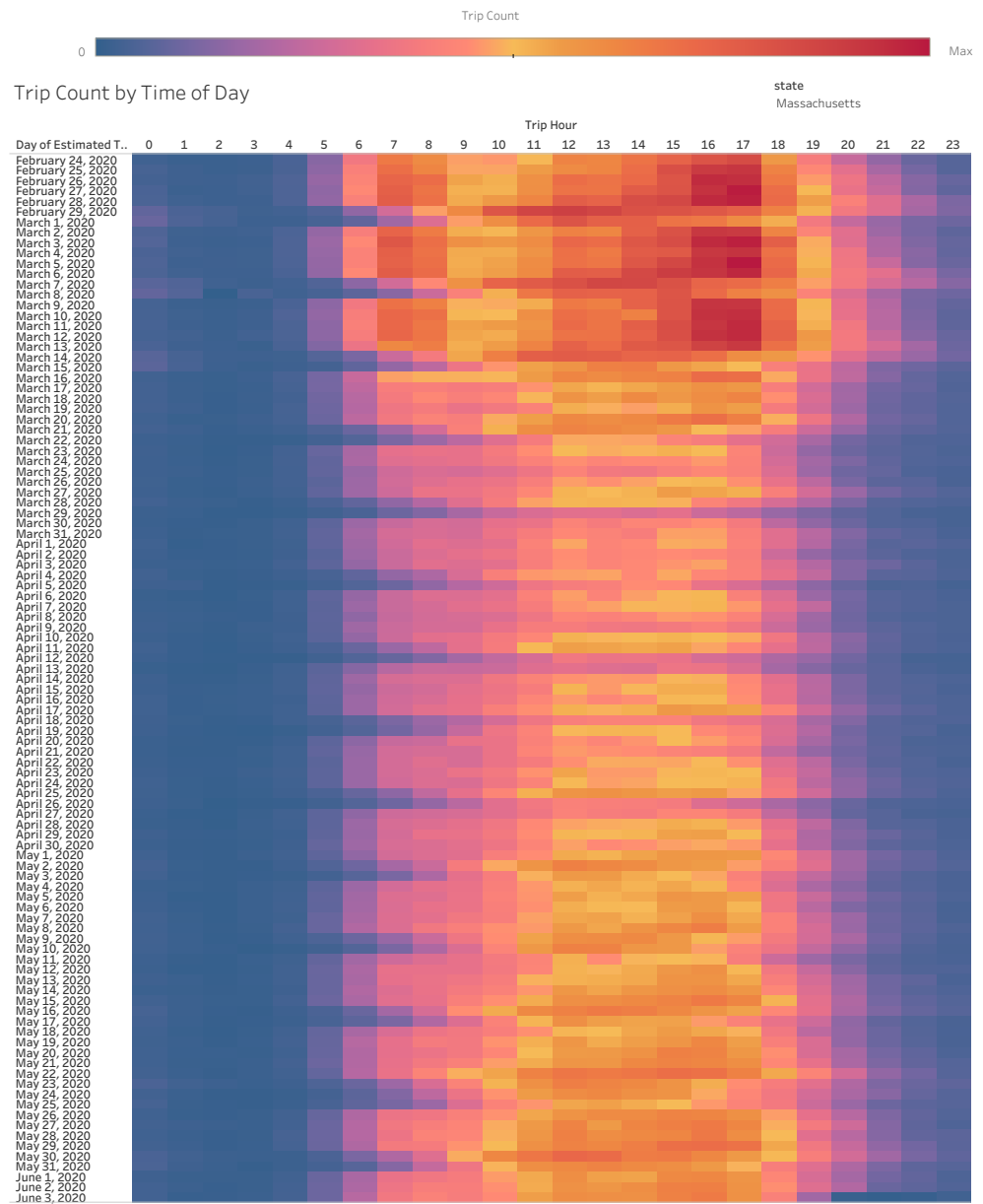
When ranked as categories, the results showed that **safety** was the priority for the largest group of respondents (30%). In fact, 17.7% of them picked **only** the four safety functions. Interestingly, 33% of respondents would be likely or **very likely to accept paying \$5 per month extra** for services. If they are using UBI today, then this rises to 40%

Driving-based pricing isn't the only potential opportunity for connected insurance; respondents showed significant interest in an app that helps them receive a quote and submit a claim. The traditional approaches to **receive a quote** – in person and by phone – satisfy only 40% of the customers. 40% prefers online and 20% a mobile app. The latter percentage jumped to 27% among Millennials.

Millennials consider apps to also be the best way to submit a claim (30%). The current approach from most of the carriers that requires claims handlers to talk on the phone is fine for 52% of the Boomers, but drops to 35% for Gen X, to 26% for Millennials and to 20% for Gen Z. That generation, which is the youngest and largest in the U.S., already shows a healthy appetite (18%) for an **automatic opening of claims** through telematics data, even if this kind of approach has not yet been rolled out in volume in the U.S.

In a recent study, CMT has observed drastic behavior change resulting from COVID-19 lockdowns that have in turn made connected insurance value propositions even more attractive to U.S. drivers.

DRIVING PATTERNS DURING RUSH HOURS IN A COVID-LOCKDOWN US



As local governments began to react to the virus by locking down cities and states, normal driving patterns disappeared. By the third week of March, morning (7-9 a.m.) and afternoon (4-6 p.m.) rush hours were gone, and as quarantines have loosened those heavy concentrations of traffic have not returned. Commuters are using their vehicles differently, and there is no clear indication if or when things will return to normal. As a result, previous risk models for commuters are rendered unusable; without individual driver data, insurers' traditional risk proxies are no longer predictive.

Source: Cambridge Mobile
Telematics Insights Team

A. The Five Connected Insurance Use Cases

Using telematics data in the insurance sector was introduced with the idea of tracking a vehicle's use and pricing insurance based on the policyholder's driving behavior. Today, it allows insurance companies to reward those who opt into **safe driving programs**, show fewer risky behaviors, and score well.

As technology evolved, it allowed for new, more robust business models. This has been particularly noticeable since **smartphone-centric insurance has introduced a brand new direct and constant channel of communication** between the insurer and the insured. In what is often coined as the age of connected insurance, insurance has evolved into a digital in-app service, complete with mobile sensor data that informs state-of-the-art analytics and feedback to drivers.

Together with frequency and richness of interaction, telematics brings another benefit. By selecting the risks, influencing driving behavior, and using the crash data efficiently during the claims handling process, carriers are able to **increase their margin**.

Connected insurance opens a number of avenues:

- ✓ It **improves carriers' understanding** of each driver's risk and their receptiveness to new offers such as up- or cross-selling.
- ✓ It creates new ways to underwrite known risks and new products to insure new risks.
- ✓ It generates **positive externalities** by improving overall safety and crash volumes [3].

The core use and benefits of telematics can be organized in five categories [4].

1. SELECTION

Risk selection occurs both at the acquisition and renewal stage.

Self selection still plays a key role in risk selection in the U.S., whereas Usage-Based Insurance (UBI) is not limited to niches such as the young drivers segment. In South Africa, Discovery Insure identified that its Vitality Drive customers were 10% less risky than other drivers with equivalent profiles.

In the U.S., self selection is now so prevalent that analysts are witnessing negative selection as risky drivers are less likely to participate in telematics programs.

Telematics data also complements static variables to determine risk more accurately and at an individual level. Better underwriting decisions can be taken using a Try Before You Buy (TBYB) program or using various value propositions in a Pay How You Drive (PHYD) program. The three business models are detailed below.

Three main types of business models for connected insurance

TBYB

Carriers can attract the safest driver by using app-based scoring to price potential customers via smartphone telematics. This model changes the dynamics of the typical quoting, underwriting, and binding process by using risk data up front. Insurers can then tailor risk selection and pricing based on an individual's driving behavior as opposed to relying on other extraneous variables like credit score.

Using this model is a great way to introduce the market to the benefits of insurance using a safety-centric message. From the perspective of the drivers, they benefit from a personalized quote based on their driving data which is a more equitable way to price and manage risk. Driving behavior is a changeable variable, unlike the majority of other factors that insurers use today.

Behavior-Based Insurance

Programs offering a new business, mid-term, and/or renewal discount to policyholders based on their driving behavior are considered Behavior-Based Insurance. The programs are essentially focused on price segmentation and risk assessment. The rating criteria are often limited to mileage, time, and acceleration. Continuous engagement programs (those that don't rely on a limited number of days to assess driving behavior) also utilize feedback to improve driver behavior and reduce risk.

Pay As You Drive (PAYD)

PAYD or Pay Per Use programs use telematics to identify precisely how much is driven. Insurers charge a very low base rate with a variable amount charged per usage.

It is very simple to understand, identifiably fair, and promotes reduced mileage and sustainable mobility. Since the coronavirus pandemic, the model has found renewed proponents. Some insurers have also started to consider prepaid miles and rewarding safe behavior with additional free mileage.

A New Wave of Distance-Based Insurance

Upcoming PAYD models emulate leasing or mobile voice and data contracts primarily by introducing a choice of packages that negate the monthly bill uncertainty while incorporating varying degrees of flexibility. Secondly by providing the option to integrate behavior-based pricing into a mileage-based program. We'll detail below three models:

Variable Mileage Plan

Drivers choose their monthly mileage plan on top of a fixed annual subscription. Each month, they can change the size of the plan. An element of behavior can be included in the calculation of the annual subscription of the next year.

Rolling Top-Up

Drivers pay a premium including a set of miles of their choice. Once they run out of miles, they can top up. There are no annual renewals, the top ups continue as long as the drivers want.

However, in order to engage the drivers, insurers can opt to calculate the top-up costs based on the driver's behavior score.

Monthly Miles Rewards

Drivers pick a fixed mileage contract in which the premium is paid at the end of each month. A reward is attributed to the drivers each month they drive less than the threshold. At renewal, their new initial fixed mileage contract is priced according to their score.

2. PRICING

Risk-based individual pricing is an option on existing products or as a standalone product. It can be facilitated by telematics programs with ongoing monitoring of the quantity and level of risk exposure throughout the coverage period.

Accordingly, on the basis of the information gathered by each driver, the “telematics-enhanced risk” can be calculated and turned into an individual price using different approaches:

- ✓ PAYD where the price is based on driver monitoring and risk exposure assessment
- ✓ Individual risk assessment applied at the underwriting stage, and eventually at each renewal
- ✓ A value proposition based on “individual pricing” applied at renewal (after the monitoring)

Telematics greatly improves driving behavior since premiums are based on factors they have control over including driving behavior. Unlike static criteria that placed them into predetermined risk segments, these criteria can be more transparent and fairer. This approach is similar to payroll-based workers compensation programs that are commonplace with U.S. commercial insurers.

3. SERVICE

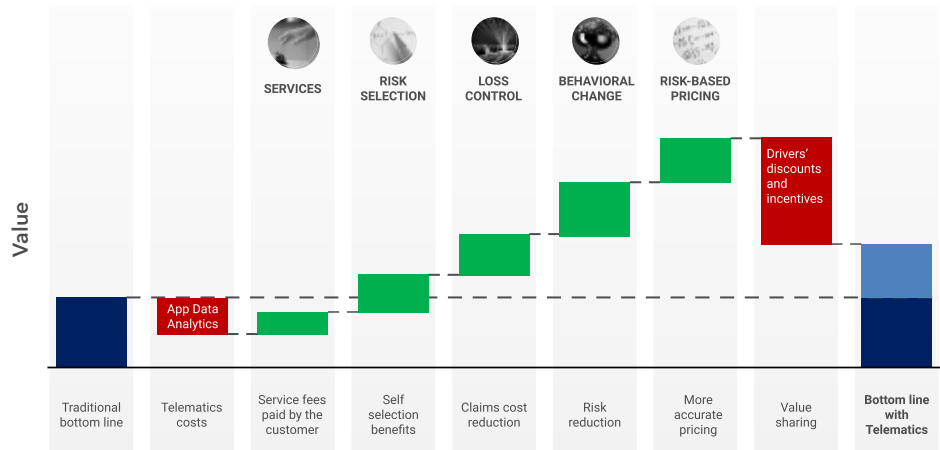
Value-added services consist of policy-related ancillary services sold to the insured. They are generally - but not always - based on positioning and connectivity. These services represent an opportunity for the carrier to distinguish itself from the competition. They are also generating new opportunities for interaction and stronger ties between drivers and carriers, which in turn impact retention positively.

A well known telematics service is the emergency response in case of collision or vehicle breakdown. Mobile sensing, AI, and IoT are used to recognize collisions and trigger an alert. The information can then be automatically fed into the claims system. The IoT Insurance Observatory has mapped multiple international insurers that have been able to build successful programs by bundling auto insurance products with additional paid-for services.

Graph 1:

TELEMATICS VALUE CREATION FRAMEWORKS

Source: IoT Insurance
Observatory



4. CLAIMS

Claims management and loss control improvement are areas where telematics helps improve both customer experience and combined ratios substantially. The same technology can be used for crash detection and alerts.

Following a crash, telematics data can accelerate claims detection (FNOL), provide better claims descriptions, as well as **triage claims and engage the right repair network**. This process also detects fraudulent claims. Recently, real-time risk prevention alerts, such as weather or distraction, have been assessed by insurers.

In this model, insurers benefit from reduced loss adjustment expenses. For the drivers, the benefits are tangible: rapid response in case of crash and faster claims resolution.

As an illustration, the IoT Insurance Observatory has mapped out the international claims programs with the best results:

- ✓ Up to 75% of the claims in the telematics portfolio handled within one hour
- ✓ Reduction in the average time to settle the claim by up to 10% on the entire telematics portfolio
- ✓ Reduction in the amount paid for third party liability claims (change in the liability, denied, and waived claims) by up to 15% of the telematics-based claims
- ✓ Decrease in the average severity of up to 11% on the telematics portfolio

5. RISK REDUCTION

Risk reduction by behavioral change through rewards-based programs is an opportunity many insurers have started to understand. Gamification and rewards mechanisms have a markedly more pronounced impact on driver behavior than discounts. With distraction taking center stage as the most risk predictive criteria, insurers are looking at building ecosystems of partners to generate rewards in exchange for branding visibility.

In this model, events such as acceleration, braking, cornering, distraction, and speeding are all used to rate each drive and give actionable feedback to the driver. **Accurate data and continuous feedback are both essential to behavior change.** Program design items including rewards types, amounts, and variation are all factors that can amplify the rates at which risk reduction occurs within a telematics-based rewards program.

Discovery Insure in South Africa is leading the industry in the effort to establish best practices in behavior change.² Vitality Drive is to date the most successful insurance product with published demonstrable results in terms of driving habits improvement.

Risk reduction can also be implemented through **safe driving contests**. Since 2016, CMT has been partnering with municipalities and insurers to specifically address distraction. While promoting safer driving in the community, these contests provided participants the opportunity to compete for prizes for safe driving scores, promoted wide-scale driver behavior change, and generated multiple benefits for the sponsoring insurers.

Each competition offered eligible participants the chance to win prizes for monitoring and **changing their own behavior**. Award categories addressed the core problems each region was trying to mitigate, including least distracted, least speedy, and most trips taken on public transit.

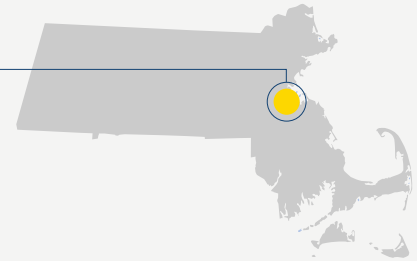
The benefits of telematics are generated through a mix of all the use cases described above. Some of the success stories around the world have combined different features and others have been more focused on a particular service provision. Ultimately each market has had to **respond to their drivers' demands**.

² See *Discovery Insure Case Study* on page 32.

The results of these contest in terms of improved safety speaks for themselves:

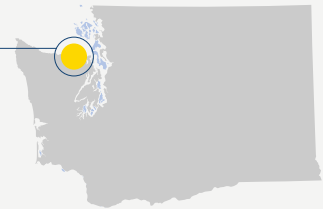
Boston's Safest Driver 2016

47% reduction in distraction
37% reduction in hard braking
35% reduction in speeding



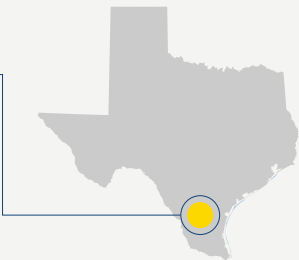
Seattle's Safest Driver 2017

35% reduction in distraction
30% reduction in hard braking
28% reduction in speeding



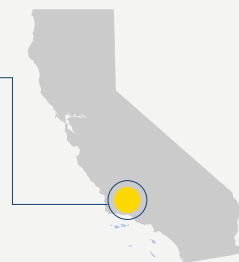
San Antonio's Safest Driver 2018

29% reduction in distraction
17% reduction in hard braking
45% reduction in speeding



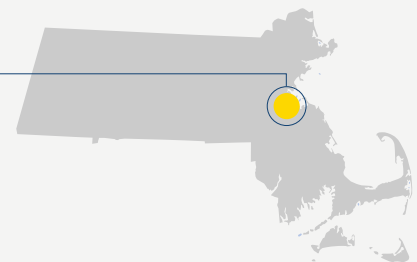
LA's Safest Driver 2019

25% overall reduction
35% reduction in speeding
30% reduction in distraction



Boston's Safest Driver 2019

33% overall reduction
48% reduction in distraction
57% reduction in hard braking
38% reduction in speeding



B. US Drivers' Acceptance of Connected Insurance

1. CONSUMER PERCEPTION OF INSURANCE PRICING

More than half of consumers (55%) believe they have full clarity as to how insurance prices are set. However, when asked how they preferred their rates to be determined, there was a strong rejection to some of the main elements that drive insurance pricing today.

Consumers want their premium to be based on how they drive [5]:

How insurance prices are currently calculated	How consumers prefer pricing to be calculated (2017)
Gender/age/marital status	3%
Where you park or live	4%
Credit score	4%
Vehicle make & model	7%
How safely you drive	74%

2. CONSUMER AWARENESS AND ADOPTION

"The Future of Insurance Survey" suggests U.S. customers have never been more ready to adopt telematics.³

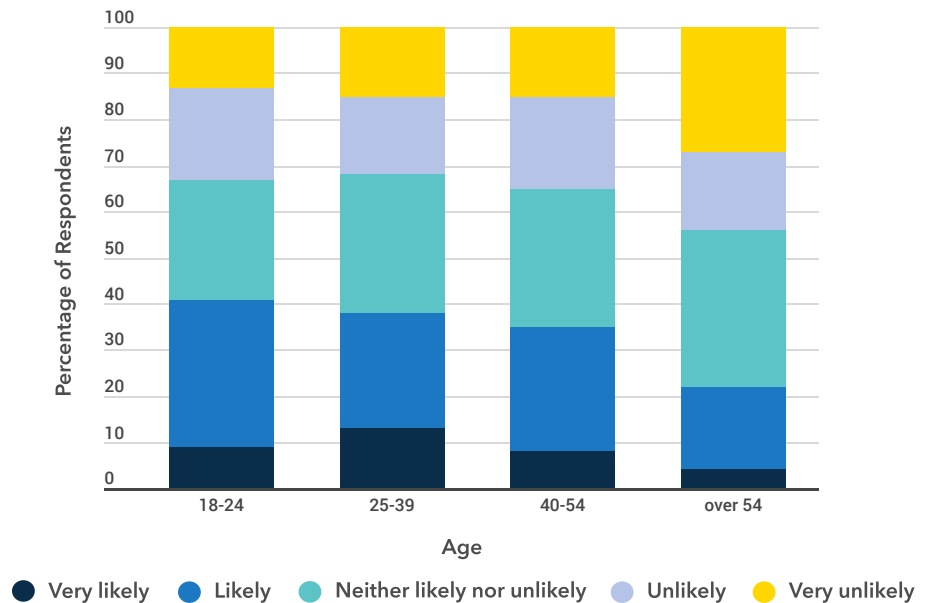
33% of the respondents said they are "very likely" or "likely" to adopt it but also pay an additional \$5 per month for additional services. Out of the people using UBI today, the figure rises up to 40% of respondents willing to pay for services. As the graph below shows, the younger the driver, the more appealing connected insurance is.

It is also remarkable to note that interest in connected insurance is now found even in the traditionally resistant age groups: **22% of respondents over 54** are "very likely or likely" to switch today.

³ See survey methodology on page 36

Graph 2:
**APPETITE FOR
CONNECTED
INSURANCE
IN THE US BY AGE**

Source: Future of
Insurance Survey 2019



Additionally, another 31% of respondents showed a neutral attitude toward the concept. There are potential drivers that could be converted if the telematics-based premium was attractive and the service level was as expected.

Today, connected insurance represents only about 5% of the U.S. market, so a 64% share of drivers ready to switch represents a key competitive advantage for the carrier with the right offer.

How to Transform Acceptance into Adoption

Education comes first.

Insurers have an opportunity to capture market share through value-added services. This was illustrated perfectly in the survey as no less than 40% of respondents already using UBI today were open to paying for services.

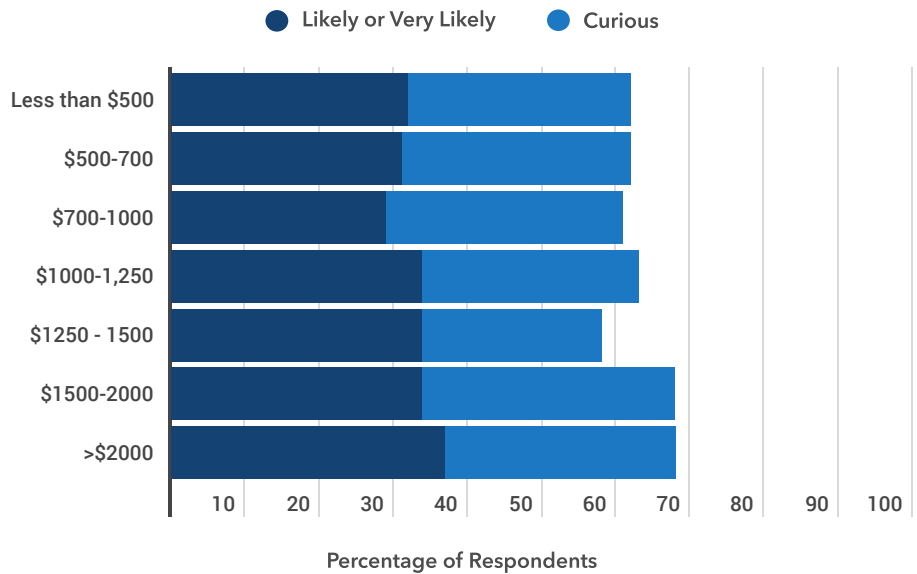
In 2017, CMT's "Connected Insurance Market Sentiment Survey" found that for those who were offered telematics-based insurance solutions, 46% enrolled. In the follow up survey in 2019, this increased five points to 51%. The vast majority (65%) of those respondents were offered pricing-focused programs.

Choosing the right target segment is then very important.

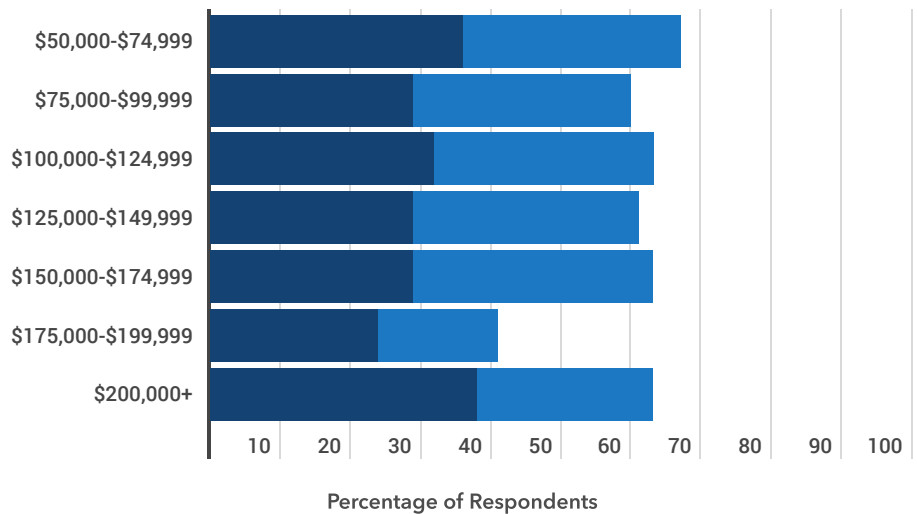
The most likely segment to pay for VAS are the 18-24 age range, the most unlikely are the over 54. Premium and income were not proportionally related to answering who would pay. 38% of the most well off would happily pay for VAS and 36% of the lower income bracket would also pay for VAS. It is the mid-income bracket that is most reticent to extra charges for services.

Consumers' perceptions are shaped by what has been communicated on the market today. The major marketing messages around telematics have **all included significant discounts** at the core.

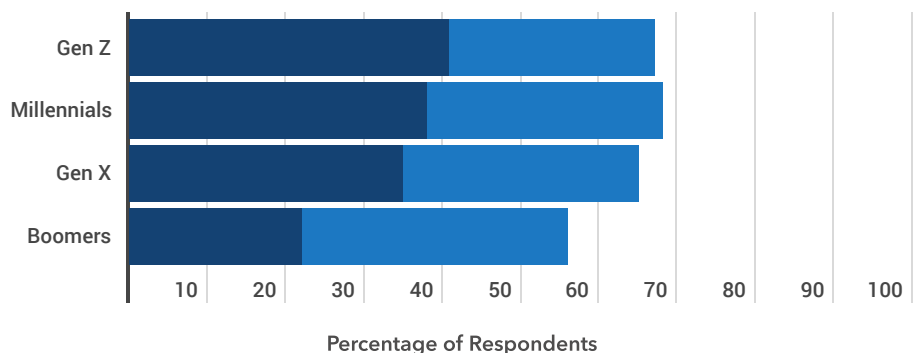
Graph 3:
**LIKELIHOOD
TO ADOPT
CONNECTED
INSURANCE
BY PREMIUM PAID**



Graph 4:
**LIKELIHOOD
TO ADOPT
CONNECTED
INSURANCE
BY INCOME**



Graph 5:
**LIKELIHOOD
TO ADOPT
CONNECTED
INSURANCE
BY AGE**



Source: *Future of Insurance Survey 2019*

The driving force behind the adoption of telematics has historically been an exchange between the consumer and the insurer: **monitoring for discounts. Telematics is much more than this, and rapid technological evolution has enabled more capabilities.** By and large, more drivers are now expecting a telematics discount insurance program.

The driver surveys agree, demonstrating that consumers are now interested in much more.

83% of drivers are now more interested in an insurance company's product if it offered tools to keep their families safer on the road. On top of that, **78% prioritized emergency roadside assistance** as the most important feature of a family insurance product, while 60% are interested in trip-by-trip safe driving analysis for them and their families.

Respondents even show a willingness to pay for these features. Ultimately, **63% of the respondents would agree to or consider swapping their current insurance** for a policy with a telematics-based premium and **pay an additional \$5** monthly fee for telematics-based services.

3. BUSINESS MODEL AND DELIVERY

The 2019 "Connected Insurance Market Surveys" found that despite the fact nearly ALL communication around connected insurance is based around price, 23% of the people offered connected insurance put the safety feature as a major criteria impacting their decision.⁴

When the safety features are explained, 83% of respondents would choose the product. Also, while the vast majority of respondents that already signed up for connected insurance did so for the discount, they are much more favorable to the safety benefits.

The TBVB model has been tested for many years now and has proven to work by carriers worldwide. Smartphone-centric insurance has made this possible and in 2018, they represented 20% of the active programs.

The great news is that drivers like them. For example, as part of the U.S. "Connected Insurance Market Sentiment Survey," **64% of drivers** asked would download an app that tracks their driving for two weeks to get a more personalized quote.⁴ Apps are becoming an intrinsic acquisition accessory for the direct insurer, but also have substantial value for the broker-agent channel.

Today, 100% of carriers with over \$2 billion GWP in the U.S. have a connected insurance offer, but the share of drivers who **were offered telematics-based policies** in 2019 is a paltry 27% (up slightly from 22% in 2017) – as per the U.S. "Connected Insurance Market Sentiment Survey."⁴

⁴ See survey methodology on page 36.

Remarkably, of those that were offered telematics insurance, the acquisition rate was a staggering 50% in 2019 (versus 46% in 2017).

4. REMAINING OBJECTIONS

When exploring drivers' sensitivities and the reasons why they would avoid telematics, the U.S. sentiment survey identified three areas of concern:

- ✓ 20% of drivers are unconvinced of the program's benefit, specifically they fear they will end up paying more for auto insurance.
- ✓ More common are the fears over privacy and data; the biggest concern was over the loss of privacy and control over personal data.
- ✓ This was supplemented by concern over personal data being shared with third parties including the police.

There is a gap between perception and the reality of the vast majority of telematics programs in the market. The opportunity to overcome these objections is to **communicate clearly**, openly, and honestly with all facets of the program.

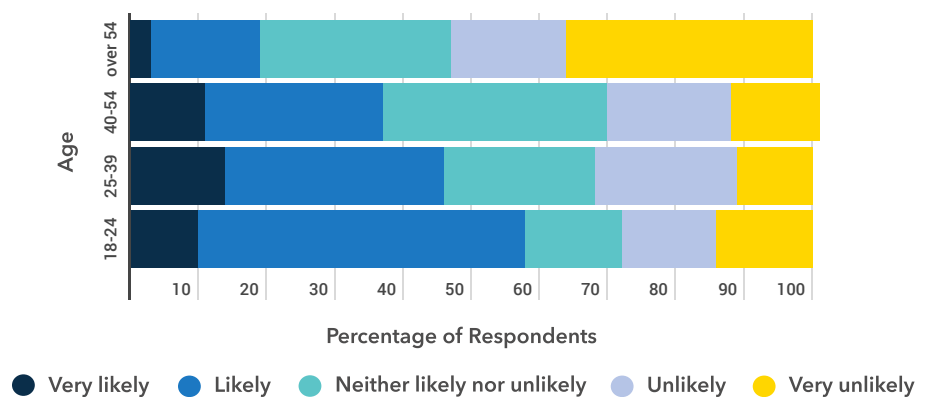
At the same time, when looking at what insurers could do to make telematics programs more appealing, 54% of respondents mentioned the need for reassurance that their personal information would not be misused and 55% that their **rate would not increase**.

In the more recent "Future of Insurance" survey, the pushback suggested incredible growth potential. The limitations highlighted in this survey reflect unwillingness to participate in connected insurance programs and pay for services.

Graph 6:

URBAN DRIVERS LIKELIHOOD TO SWITCH TO CONNECTED INSURANCE BY AGE

Source: Future of
Insurance Survey 2019



Insurers can overcome the negative perception between privacy and discount through consumer-focused privacy policies, transparent communication, and by placing safety and family protection at the front of the conversation.

C. Key findings from the Future of Insurance Survey

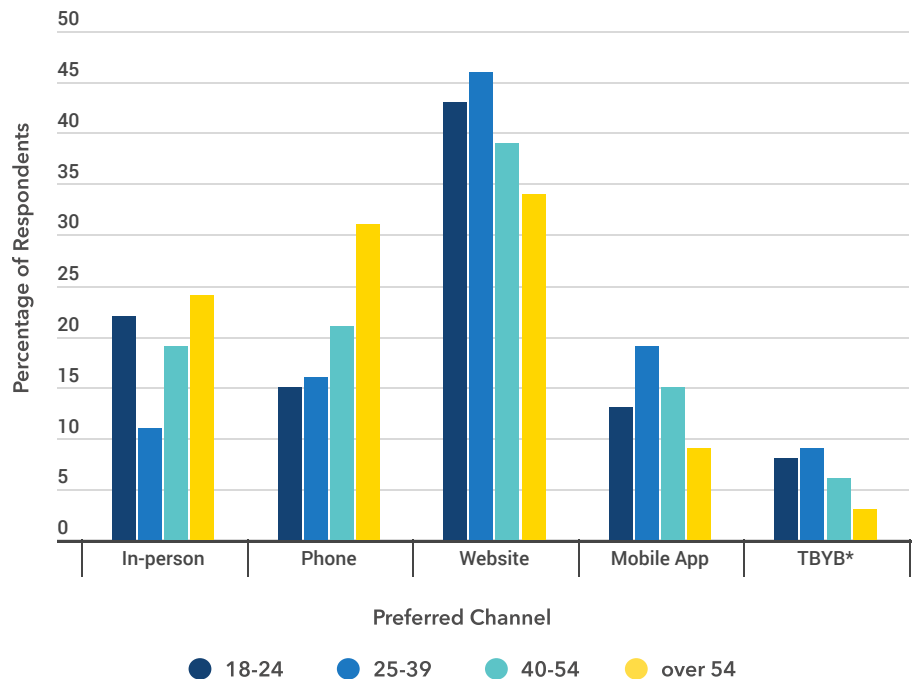
1. PREFERRED COMMUNICATION CHANNELS WITH INSURERS

Graph 7:

PREFERRED CHANNEL TO OBTAIN A CAR INSURANCE QUOTE BY AGE GROUP

Source: Future of Insurance Survey 2019

*Through a mobile app that validates the quality of my driving for two weeks



Getting a quote online seems to be the favorite route for 40% of U.S. drivers. But 21% still prefer to talk to a person when buying insurance and that goes up to 31% when asking older drivers.

The segment paying between \$700 to \$1500 in premiums were also most appreciative of human interaction, both at time of claims and quoting. The segment paying under \$500 in premiums was the **least likely to use a website** to find cheap quotes (31%).

The TBYB model was not picked as the favorite option here, despite other surveys suggesting people liked the concept. Still, more than 20% of respondents are happy to get a quote through an app today. The **timing** in the customer's journey of the communication around this model will be core to its future success as much as the **education** is. The drivers with a UBI program today are four times more likely to use TBYB for quotes than the drivers on standard insurance.

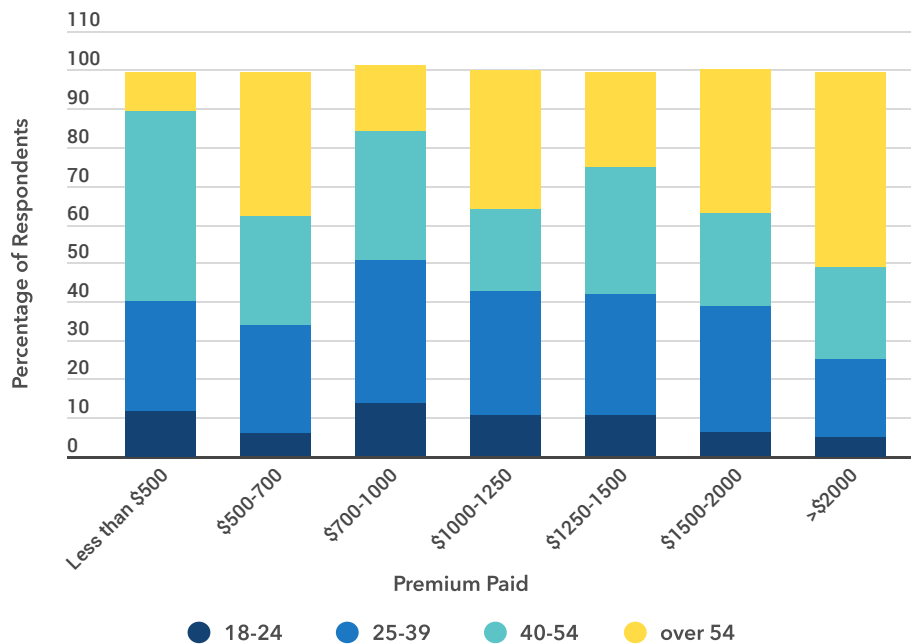
This matters greatly because auto insurance shoppers will on average obtain three to four quotes before buying [6]. Also, very few (2-3%) new customers enter the auto insurance marketplace every year. Yet, the number of **drivers shopping** for new policies has increased by four points in 2019 to 33%. Likewise, the rate of **switching** among insurance shoppers has increased from 31% to 35% in the same period. As a result, overall **retention** rate in the U.S. has decreased by two points to 88% [7].

Like with buying insurance, U.S. drivers prefer **submitting a claim** directly with a person. 49% preferred that route, and the vast majority were more comfortable doing so over the phone. Self claim app-based systems or automated claims functions were not tried or not trusted at this stage by older drivers. In the younger generations, the appetite was clearly there: 37% of Gen Z drivers, while 43% of the Millennials favored app-based and automated claims.

Further research into the results highlighted that the segment paying \$500 to \$700 in premiums was the most attracted to automated claims processing. This is generally the premium paid by matured, experienced drivers with little or no at-fault claims history.

Graph 8:
**US AGE GROUP BY
PREMIUM PAID**

Source: Future of
Insurance Survey 2019



As the age by premium paid chart shows, 49% of the drivers that pay less than \$500 in premiums are 40 to 54 years old. At the other end of the scale, the over-55 age segment represents half the population that pays very high premiums and are the most likely to file a claim over the phone.

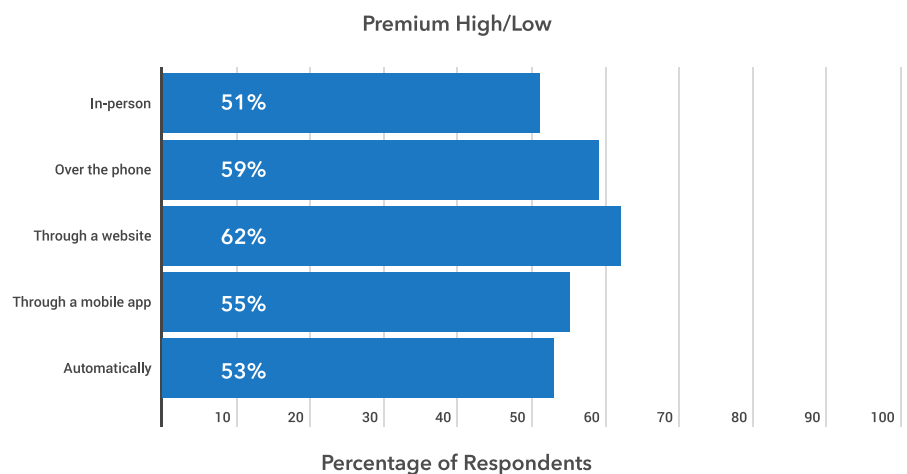
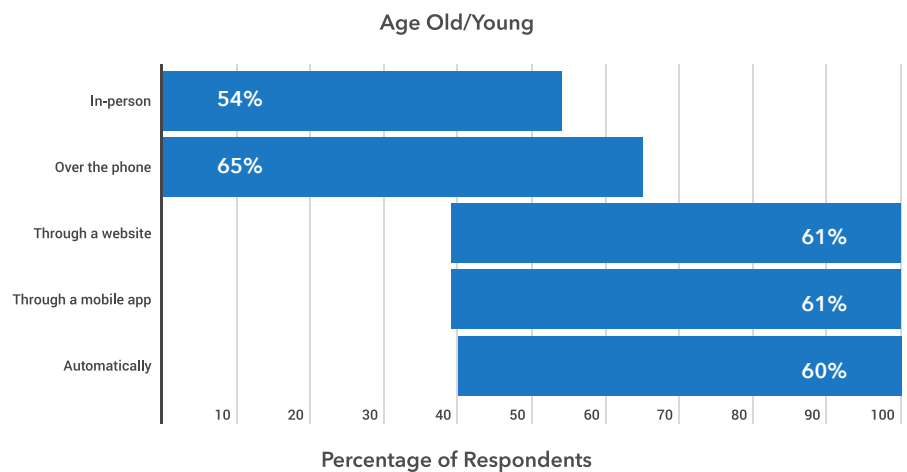
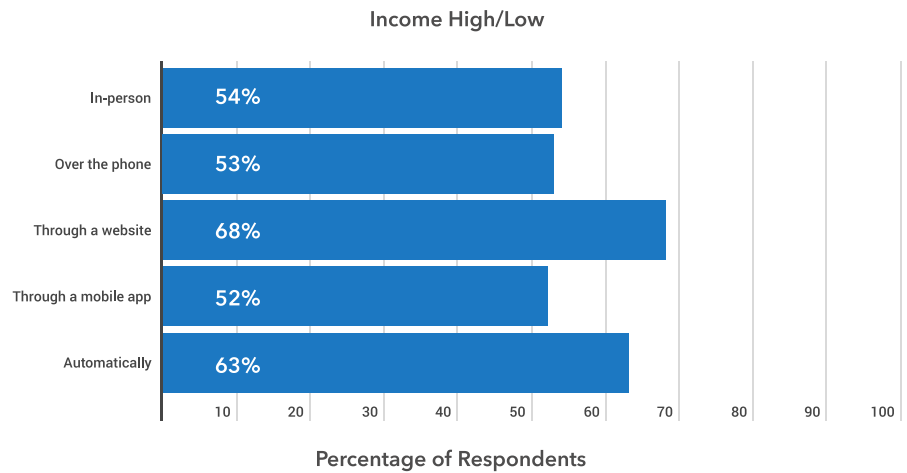
These responses suggest that while **there is a very potent opportunity for automated and app-assisted claims filing offerings**, insurers need to ensure the choice is in the drivers' hands.

Even when claims are submitted by phone, telematics can be used to increase the speed at which the claims process flows and the customer can grant permission to the insurer to access data in near real time while on the phone to **pre-fill loss details** and accelerate the resolution.

Graph 9:

PREFERRED CLAIMS CHANNEL BY INCOME, AGE, AND PREMIUM PAID

Source: Future of Insurance Survey 2019



2. KEY FINDINGS ON PREFERRED VALUE PROPOSITIONS

Model 1: Pay As You Drive

Drivers pay a monthly subscription (\$29) and then pay \$0.06 per mile when they use their car. Often dubbed **PAYD**, this model requires a device attached to the vehicle with its associated cost. It generally targets urban drivers with good access to public transportation.

Model 2: Discount Increase at Renewal

Drivers receive a **small discount upfront** (5%) and a large range of potential **discounts available at renewal**, depending on driving behavior (30%). This is a common offering available in the U.S. today. Variations of this model alter the period in which data is collected, when discounts are eligible to be changed and how frequently feedback is provided to the driver.

Model 3: Monthly Cashback

Drivers receive a small discount upfront (5%) and a range of potential discounts are available at renewal (20%), but during the contract, they have the opportunity to receive **monthly cashback** based on driving behavior. The distinction with this model is that there is an incremental return of the premium throughout the program in the form of a dividend based on telematics data and claims history.

Model 4: Strong Upfront Discount

The classic Italian offer, the market with the highest telematics penetration worldwide: a **strong upfront discount** (20%) with adjustment at renewal (30%) based on behavior.

Model 5: Rewards

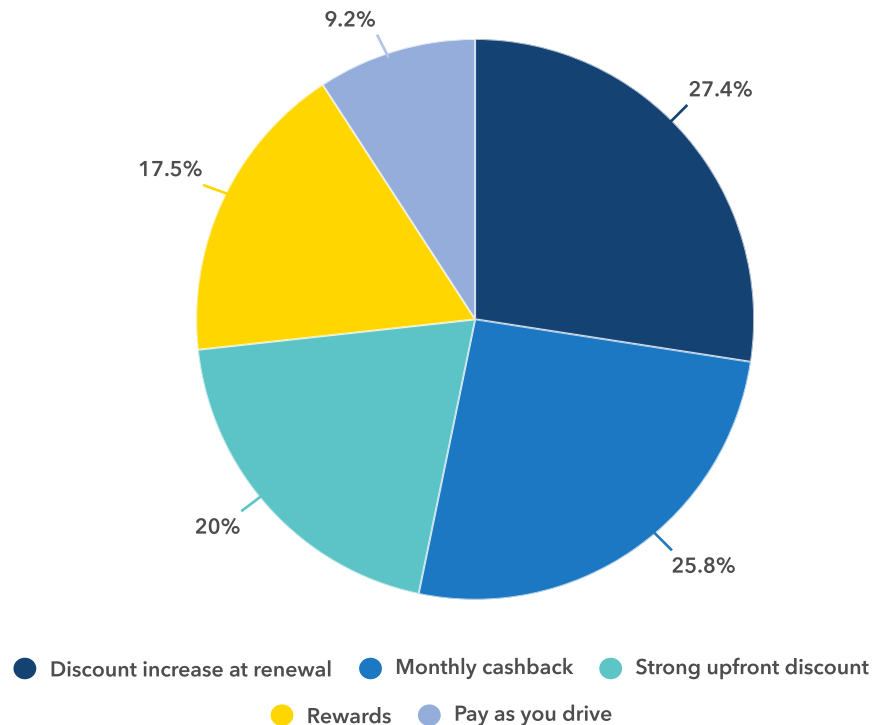
Instead of the premium, this model uses rewards to drive loss mitigation and risk reduction. It is designed to lower loss frequency and severity through **variable incremental benefits based on continuous engagement** with the customer. Rewards take the form of vouchers, such as 50% off on gas bills, gift cards, or contests. The aim is to make driving feedback and the economic value of the reward more impactful year round.

Graph 10:

PREFERRED CONNECTED INSURANCE MODELS (SHARE OF RESPONDENTS)

Source: Future of
Insurance Survey 2019

2019 Survey Results



The survey results reinforced what has been known for a while: [1] Inertia plays a strong role to play and general paradigms developed within defined geographic regions result in individuals favoring the business models that are the most widely distributed. [2] Awareness of novel business models is low and – until recently – insurance was not a highly researched product, therefore individual buyers do not always investigate as much as what they already know when they make a purchase decision. When offered a choice of five pricing models, **respondents chose the two models most widely used** in the U.S. today.

Model 2 was the preferred offer with **27.4%** of the votes overall.

The program is also the most popular today in the U.S. and it is possible that respondents felt more comfortable with the proposition. In fact the model was singled out by **32% of the respondents that already use UBI today**. Higher income brackets were specifically enthusiastic. This model was chosen by **41%** of the \$175- \$199,000 per year income bracket and **31%** (the biggest share) of the 40 to 54 years olds.

Model 3, also fairly common in the U.S., came in a close second with a very similar profile to Model 2 and a **25.8%** share of the vote. However, the other two models were chosen by **one-fifth** of the respondents. This suggests a real opportunity for experimenting with new approaches.

Less predictable was that the model with the highest up-front discount was the third chosen with **20%** of the vote. **Model 4** with its **large early payoff** was favored by drivers with no experience of connected insurance and the ones with the highest income.

Finally, **Model 5**, which is so successful in South Africa, was only picked by **17.5%** of the U.S. population. While other models show very little discrepancy between the size of the premium, for Model 5, there is a strict link between how much is paid and the likelihood of picking the model. The **lowest premium payer chose it at 23%** and highest payers down to 13%, with **young urban** drivers being the core segment.

Because all of the other value propositions that were tested in this survey used price as the main mechanic, it reinforced the participants' views on their premium dollar spend. Also, the short definition of the model in the questionnaire could not necessarily convey its true attractiveness which essentially rewards good drivers with something other than cash. At the time of writing, **rewards programs in insurance have not been marketed with the same share of voice that pricing programs have.**

Price is the leading factor that triggers a customer to shop, according to J.D. Power's 2019 "Insurance Shopping Survey," with 64% of insurance shoppers citing price as their primary reason to look for new insurance. Competitive pricing is the most influential part (33%) of the decision to close with a brand. The results of this survey seem to align on that **discounts are marketed first** in the U.S., ahead of brand value and of course, a competitive offer. Defining the features and services that make such a competitive offer is the scope of the next section.

The bottom line is that an insurer's price needs to be competitive to attract and retain customers. Telematics offers that enhance the carrier's ability to do so have a strong attractiveness to consumers that have been heavily marketed to in the U.S. Price is a key ingredient in their insurance buying process.

3. FAVORITE FEATURES AND SERVICES

While many of today's connected insurance programs have traditionally been based on price, a number of key players are expanding their business models and offering VAS as part of insurance, both in the consumer and the fleet market.

Consumers have a very positive bias toward additional services that fundamentally improve the carrier-policyholder relationship, and some are ready to pay for those services.

As part of the “Future of Insurance Survey,” respondents were given a list of 16 features from which they could choose as many as they wanted. The responses showed not only what drivers were interested in but also what feature was valued the least.

The clear winning service was **rewards for safe driving** chosen by 62% of all respondents. That figure increases to **71%** when accounting for drivers **likely to buy** a telematics-based policy with an additional \$5 service fee. As often the case, tangible benefits trump pure safety or convenience advantages. This finding is especially important when considering the slow moving disaster that distraction represents in the U.S. and the impact rewards have on changing behavior. Rewards are discussed in more detail in the next section.

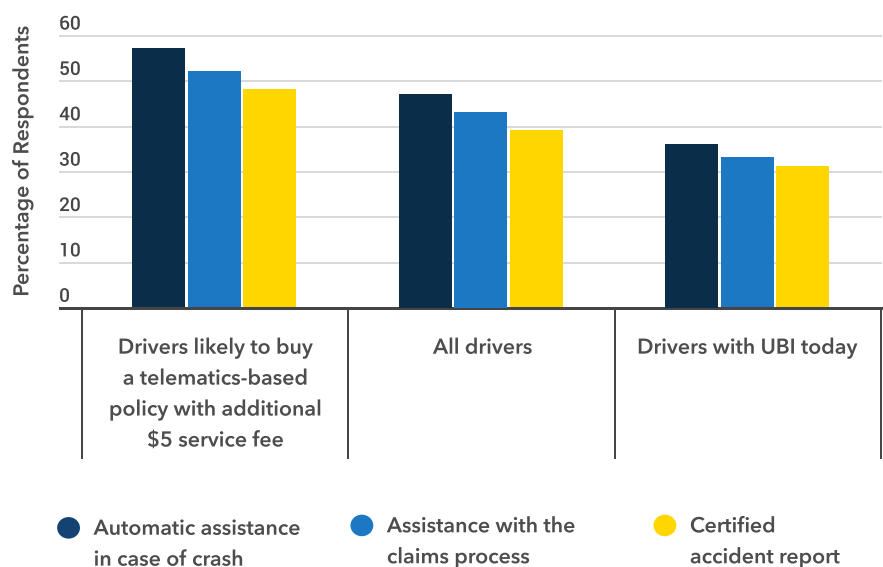
The other highly ranked features were:

- ✓ **Emergency roadside assistance**
- ✓ **Claims processing assistance app**
- ✓ **Car finder**

The survey demonstrates unequivocally that U.S. drivers now expect their insurers to play a role in their safety, especially after a crash. In fact **77%** of the respondents that were ready to switch to connected insurance identified they **expected one or more service from their insurers** if they were involved in a crash.

Graph 11:
**DRIVERS’
EXPECTATIONS OF
CLAIMS SERVICES
(PERCENTAGE OF
ALL RESPONSES)**

Source: Future of
Insurance Survey 2019



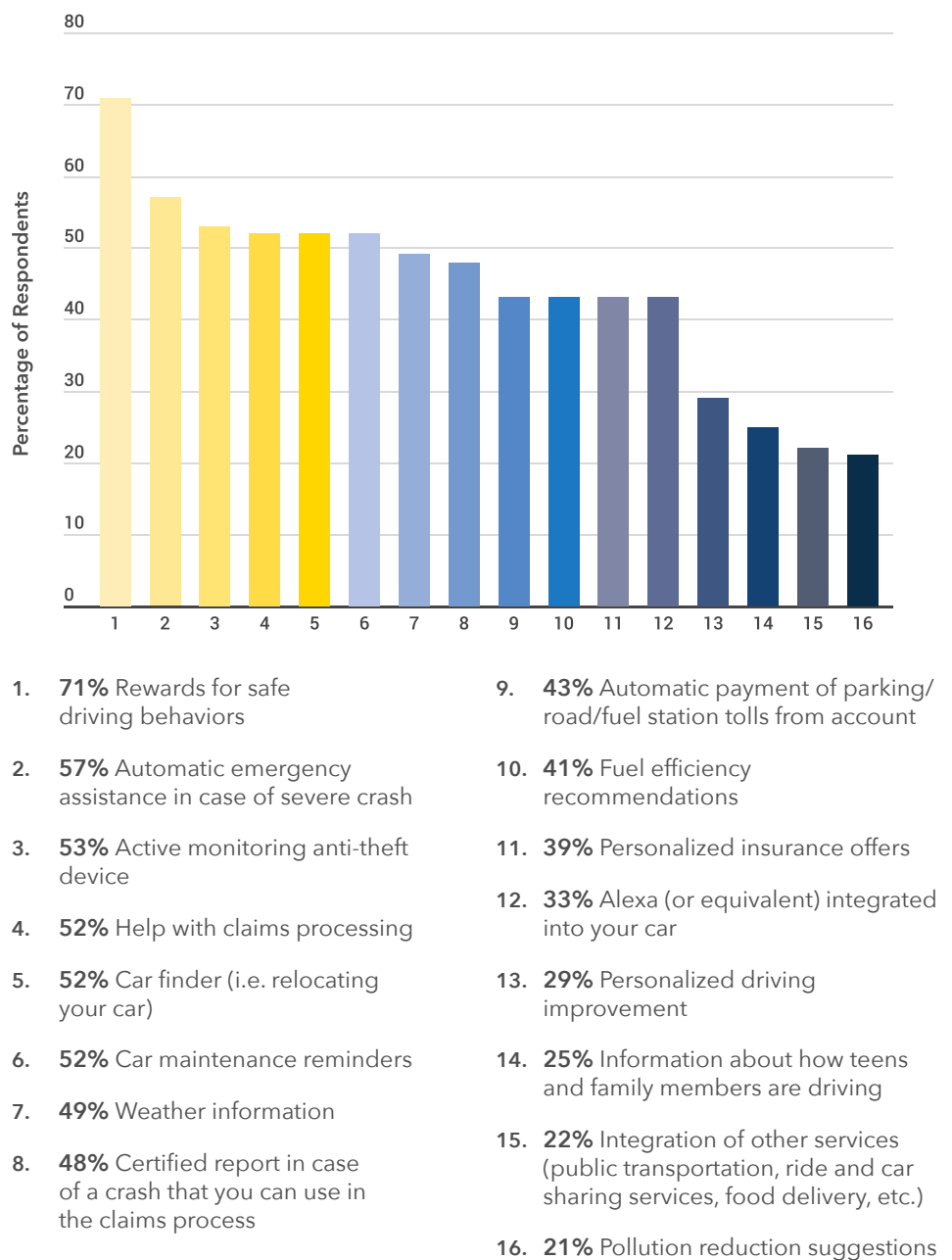
When looking at the **drivers most likely to switch** to connected insurance, the results become clearer:

- ✓ 57% of the customers would like to receive proactive and automatic assistance in case of a severe crash
- ✓ 52% would appreciate help with the claims process leveraging telematics data
- ✓ 48% asked for a certified report in case of a crash that could be used in the claims process

This last feature is most relevant among Boomers (chosen by 60%). The other key services for this cluster are stolen vehicle recovery and weather information.

Graph 12:
**VALUE-ADDED
SERVICES
CHOICES FROM
RESPONDENTS
MOST LIKELY
TO SWITCH TO
AND PAY FOR
CONNECTED
INSURANCE**

Source: Future of
Insurance Survey 2019



Graph 13:

SAFETY AND SECURITY IS THE MOST CHOSEN CATEGORY OF VAS

Source: Future of
Insurance Survey 2019

Safety/security: 30% SVR, eCall, teen tracking, rewards on safe driving <ul style="list-style-type: none"> ✓ Rewards for safe driving behaviors ✓ Active monitoring anti-theft device ✓ Automatic emergency assistance in case of severe crash ✓ Information about how teens and family members are driving 	Location-based services: 22.6% Car maintenance, weather info, car finder <ul style="list-style-type: none"> ✓ Car finder (find out where your car is parked) ✓ Car maintenance reminders ✓ Weather information
Claims/account services: 20.8% Claims processing, personalise insurance offer, crash reporting <ul style="list-style-type: none"> ✓ Certified report in case of a crash that you can use in the claims process ✓ Help with claim processing ✓ Personalized insurance offers 	Integrated services: 13.1% Alexa, parking/toll/fuel payment, public transport/ride sharing <ul style="list-style-type: none"> ✓ Alexa (or equivalent) integrated into your car ✓ Automatic payment of parking/road/fuel station tolls from account ✓ Integration of other services (public transportation, ride and car sharing services, food delivery, etc.)
Recommendations: 12.2% Fuel efficiency, pollution reduction, driving improvement <ul style="list-style-type: none"> ✓ Personalized driving improvement ✓ Fuel efficiency recommendations ✓ Pollution reduction suggestions 	

As categories, the results showed that **safety** was the priority for the majority of respondents; 17.7% only selected the four safety functions in the category.

Location-based services were a surprisingly close second in this survey. Features such as **car finder** and **weather** were both chosen by roughly 40% of the respondents. It was slightly more attractive to drivers that do not use UBI today. A third of **high income drivers** felt location-based services (and especially car finder and maintenance) of great value, while they were of very little value to the low income bracket.

The survey also confirmed that the future of the planet is a priority for Gen Z and Millennials. 76% of Gen Z and 67% of Millennials showed interest in **one or both the sustainability features** (fuel efficiency and pollution reduction recommendations). This dropped to 40% for Gen X and Boomers.

4. MOST ATTRACTIVE FORM OF REWARDS

This survey shows that **points-based rewards** programs were most engaging. This rewards model is based on the long-term accumulation of points or tokens to be later exchanged for vouchers or gifts on a web portal. Both drivers with (57%) and without UBI policies today (60%) agreed and chose that model. It was also the reward format favored by the younger drivers: 42% of Gen Z.

The second most chosen rewards type was the **personal challenge** with a longer timeframe and larger presents. The higher income segment was particularly interested in that model with 48% choosing it.

Prize draws drew niches by ages – younger drivers were slightly more interested. It was also chosen by 10% of the middle income segment while **none** of the higher income segment responding picked that model.

On the next page, we illustrated one of the most successful insurance reward program. Discovery Insure's **Vitality Drive** was a precursor in the domain and initiated loyalty programs now deployed very successfully in health and life insurance.

The reward program offers:

- ✓ up to 20% off car maintenance
- ✓ up to 25% off ride sharing services
- ✓ 25% off child car seats

According to Discovery Insure's 2018 Integrated Annual Report [8], their reward program generated:

- ✓ \$29.4 million in fuel cash-back over seven years
- ✓ 500,000 Active Rewards claimed over three years
- ✓ 514,496 miles of free Uber rewards over four years, equivalent to 40 trips around the world

CASE STUDY

Combine cashback and rewards to change driver behavior like Discovery Insure.

Vitality Drive by Discovery Insure is a driving behavior program that rewards users for safe driving behaviors and achieving goals. Rewards can go toward fuel credits, ride sharing, or car maintenance services. The more engaged the driver, the higher their Vitality status and the better their rewards. Additionally, instead of fuel rewards, drivers can choose an upfront vehicle premium discount based on their Vitality status. To participate in the program, drivers must pay a \$5 monthly fee.

Discovery built a network of partners to finance and promote their rewards model. Big brands such as **Uber**, **BP**, and **Shell**, but also local maintenance networks such as Tiger Wheels & Tyre or child chair vendors such as **Babies R Us**.

Today, more than **70%** of the Discovery customers have chosen to enroll in the program.

Vitality Drive users pose less crash risk than non-Vitality Drive users:

- ✓ Customers joining Vitality Drive achieve an average of 17% improvement in driving behavior within one month
- ✓ Vitality Drive customers that remain in the program result in a 25% lower absolute loss ratio compared with customers who leave
- ✓ Vitality Drive has a 17% lower loss ratio on matured book compared with top four personal lines competitors

When asked about the key benefit of the program, Discovery responded they now could make a direct correlation between driver status and their loss ratio.



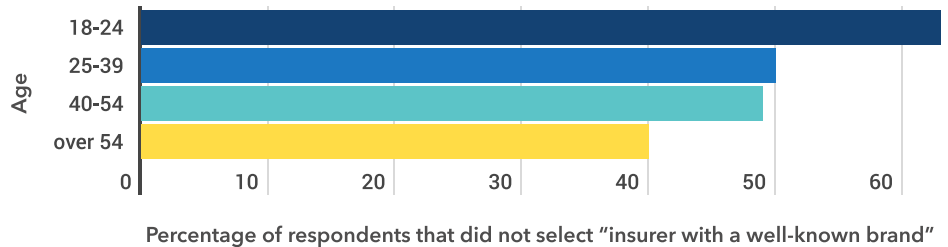
Graph 14:

YOUNGER SEGMENTS ARE MORE OPEN TO NON-TRADITIONAL CHANNELS

Source: Future of Insurance Survey 2019

5. WHO COULD SELL INSURANCE TOMORROW?

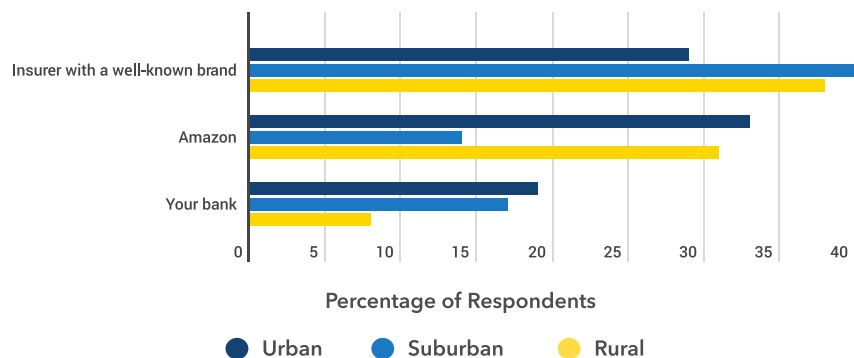
The majority of respondents (52%) believe insurance companies with a **well-known brand** are still the best way to get insurance. This is confirmed for all clusters but the position of the insurance carriers is safer with Boomers.



Banks and Amazon are at the most relevant alternative channels respondents suggested they would buy insurance from in the future. Overall, 13% chose banks over insurance and 19.6% chose Amazon. Generations were split over the preferences; 18- to 24-year-old drivers were most interested in banks as their insurance providers while older drivers were the least.

Amazon was chosen by an average of 20% of all age groups, but those over 40 years old were the most enthusiastic. It was also chosen fairly equally by all brackets of premiums but the highest payers (more than \$2 thousand in premiums per year) were slightly less likely to choose that channel (15% compared to the 19.6% average). Only 9% of those over 54 years old chose Amazon as their favored alternative.

Proving the power of brand awareness, **33% of young urban drivers put Amazon as their first choice**, ahead of insurers at 29%. That said, the segment represents a very small cluster in absolute numbers. It may be that young drivers have less experience in buying insurance but their choices illustrated here would require further research.



In terms of income, the picture is of specific segments reacting differently. For example, only 7% of the high earners thought banks were an option to buy insurance from, whereas 25% of the bracket earning \$100,000 per year preferred banks. Low premium payers were three times more likely as high premium payers to choose a bank as their next insurance provider.

Graph 15:

OPENNESS TO NON-TRADITIONAL INSURERS CHANGES DEPENDING ON WHERE YOUNG DRIVERS LIVE

18- to 24-year-olds' response to:
From which organization
would you prefer to receive
future insurance offers?

Source: Future of Insurance Survey 2019

Conclusions & Recommendations

Wide-scale adoption of telematics- based insurance programs remains elusive for the majority of insurance carriers. This report identifies key components that have hindered that adoption by comparing consumer feedback on insurance **access, value propositions, and services.**

Leading insurance carriers are introducing and growing new products that are reshaping the auto insurance industry – Try Before You Buy, Pay As You Drive, Pay How You Drive, or Rewards. There is no equal playing field for insurers, unlike when new rating variables such as credit score were introduced. **Only those who can innovate** and effectively distribute will be able to take advantage of the latest market opportunities this report described.

This has never been more obvious than during the present lockdown. Carriers with the ability to provide **flexible programs with the ability to consider the impact of COVID19** on their customers' lives have had their positioning demonstrably improved.

The bottom line is that consumers are now **more than ever aware** of, and are **interested in**, connected insurance programs. They are willing to purchase through various business models and to include a choice of value-added services.

In terms of business models, the U.S. market is still wide open. In this survey, the split between chosen models was fairly even and there was no clear winner. In light of the coronavirus crisis and the subsequent focus on mileage based insurance, this survey's results further demonstrate that **there are no niche models anymore.** When last year, drivers chose the value proposition that was most familiar to them, in a post- COVID world, the playing field will be wide open. At the same time, insurers that had the ability to measure their customers' driving pattern are in a much better position when having to consider discounting their premium.

This is an opportunity to communicate on new models that offer what the drivers want: more services and more modern claims management. More can be done to access the young drivers of today that will become the next mass market. There is no push back on many of the new features trialled today. It is a chance to introduce **behavior change** as part of the core model and create the opportunity to become more price-competitive.

When asked about the extra features an insurer should offer, more than half the respondents chose features around **safety** and **claims** management. This is really an area where insurers should confidently start engaging with their customers in order to roll out services. The rise in interest has been rapid: openly using telematics data for claims was not even being considered as little as three years ago. There is even a segment of the market that is ready for it today as a third of that group were in fact ready to **pay extra** for such services.

Those carriers will then benefit from more accurate and agile underwriting. This yields better risk selection – with products that consumers want – creating a book of business with **better drivers** than their competitors.

Modern telematics uses driver feedback as a way to improve results, yielding **lower frequency and severity** from their book of business. Proof points abound with reductions in phone distraction, speeding, and hard braking. Those same drivers also **retain better** than customers not in telematics programs, with leading carriers showing strong increases in retention. Even more impressive is the ability to drive away some riskier segments.

Finally, if a crash did happen, advancements in technology have brought about the use of telematics in claims, giving insurers the opportunity to lower **loss adjustment expense with more accurate crash data** and faster claim-to-resolution times.

Surveys & Methodology

This report is based on various surveys commissioned by CMT to a neutral market survey agency.

Ran in late 2019, the “Future of Insurance Survey” focused on U.S. drivers’ appetite for different pricing, services, and reward models. A total of 1,000 people were interviewed concerning their perspective on issues such as road safety, distraction, insurance pricing models, and services in the U.S.

A sample of U.S. drivers equal in gender and proportional to the driving population was used

- ✓ 17% of the answers were from age 17-24
- ✓ 27% of the answers were from age 24-39
- ✓ 26% of the answers were from age 40-54
- ✓ 30% of the answers were from age over 54

There was equal distribution across genders, income, and geographical regions.

Other surveys quoted:

U.S. Connected Insurance Market Sentiment Survey ran in June 2017 and April 2019 and focused on 1,000 U.S. drivers’ attitudes toward mobile telematics.

2019 Connected Insurance Market Surveys conducted in the U.K., France, Italy, Mexico, and Brazil looked at market knowledge and acceptance for telematics in insurance. They ran throughout 2019 with 1,000 respondents each with equal distribution between age, gender, and geographies

Insurance Rewards survey focused on the U.S. and U.K. drivers’ attitudes towards various types of rewards for safe driving. It ran in January 2020 with 500 U.S. drivers with equal distribution between age, gender, and geographies.

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