LEVERAGING THE POWER OF TELEMATICS:
Extending the Value Proposition to Insurance Claims

Featuring as an Example:
Octo Telematics

An SMA Perspective

Authors: Mark Breading, Partner
Karen Pauli, Principal
Publication Date: January, 2017

This perspective is based on SMA’s ongoing research on telematics in insurance.
Octo Telematics has purchased distribution rights.
TABLE OF CONTENTS

The New Era of Telematics 3

Claims in the Digital Age 3
  Customer Expectations: The Driver of Change
  Claims: A Key Differentiator

Business Capabilities for Insurers 4
  Accident Avoidance
  Accident Response
  Claims Investigation
  Theft and Fraud
  Implications of Telematics for Claims

Technology Capabilities for Insurers 7
  Real-Time Data and Data Collection
  Analytics and Insights
  Operational Platform
  Telematics Solutions

Octo Telematics 8
  Company Overview
  Breadth of Functionality

Strategy Meets Action Commentary 10

About Strategy Meets Action 10
**THE NEW ERA OF TELEMATICS**

Telematics is moving into its third era. The combination of telecommunications and computers to create new value propositions based on real-time data is most often associated with vehicles, but may also apply to any tangible “thing” and even people. The first era of telematics was characterized by experimentation and pilots, most notably the Norwich Union Pay-as-You-Drive pilot in the UK and a series of Progressive Insurance pilots in the US. That first era also saw battles over regulations and intellectual property, with the Progressive patents especially influencing market growth in the US.

In the second era, with the IP and regulatory issues largely addressed, programs were launched and expanded by many Tier 1 insurers and others in markets around the world. We are now entering the third era that is likely to see the expansion of telematics in three dimensions.

- First, vehicle telematics and usage-based insurance are likely to expand to more sophisticated value propositions as insurers leverage more data insights to move beyond premium reductions as a central benefit.
- Second, a new wave of insurers is gearing up to offer telematics-based programs for both personal auto and commercial fleet.
- And third, telematics is already expanding into new areas, as the concept manifests in the Internet of Things, wearables, and other devices in which the collection, transmission, and analysis of real-time data can be applied to other insurance lines, to both add value to the customer and reduce claims.

There are especially good opportunities for insurers to expand the value proposition with new offerings related to claims for both personal and commercial lines. For commercial fleets, great opportunities lie in telematics services for small and mid-sized fleets, with solutions scaled to better fit their business needs. Opportunities exist for large fleets as well, but the nature of those opportunities are different, and telematics is already advancing there driven by vehicle manufacturers and the demands of fleet owners. For personal lines, great opportunities exist to increase penetration rates and extend the value proposition into a variety of areas beyond premium reduction. This SMA Perspective will focus on the wide range of opportunities in the claims environment for both personal and commercial lines.

**CLAIMS IN THE DIGITAL AGE**

**Customer Expectations: The Driver of Change**

Both commercial lines and personal lines customers are looking for more value than just indemnification from losses. They also have expectations about the kinds of products and services that are possible in the digital age with companies like Uber, Amazon, Apple, and others leading the way. Across the insurance industry, companies are responding to new expectations by assessing and rethinking the key touchpoints with customers. The touchpoints during the claims process have perhaps the most impact on the customer’s perception, satisfaction, and ultimately, their desire to renew for the next policy term.

**Claims: A Key Differentiator**

Reducing overall claims, improving traditional claims by speeding up the process, improving service, and delivering a satisfactory settlement benefits both the policyholder and insurer. There are always possibilities for insurers to improve in these areas to differentiate from their competitors. And telematics offers new opportunities to improve on the traditional claims process. But there is also a “new face” of claims, one in which insurers can more actively partner with customers to reduce or eliminate accidents, lower the severity when accidents do occur, and offer new services that capitalize on the real-time data from telematics devices.
In personal auto, consumers are becoming more aware of telematics as penetration increases, but the value propositions in North America have been primarily related to premium reduction, with little focus on claims. This signals more opportunity for insurers to extend the value propositions into the claims arena which will benefit policyholders while also providing the insurer with a competitive edge.

On the commercial lines side of the business, fleet owners are looking for more ways to improve the management and productivity of their fleets, and proactive claims solutions via telematics offer new opportunities. Insurers have the potential to forge a new type of relationship with fleet owners that results in ongoing monitoring, safety advice, alerts, and rapid claims response.

It is worthwhile to explore the wide variety of new services – and corresponding value to customers – that could be based on telematics solutions.

**BUSINESS CAPABILITIES FOR INSURERS**

Telematics offers insurers the opportunities to enhance capabilities in several key areas related to claims as depicted in Figure 1. These new or enhanced capabilities provide value to customers, but also improve operational efficiencies, loss costs, and customer relationships, which can result in a win-win situation.

*Figure 1. Claims-Related Telematics Opportunities and Benefits*

<table>
<thead>
<tr>
<th>TELEMATICS-BASED OPPORTUNITIES</th>
<th>BENEFITS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accident Avoidance</strong></td>
<td><strong>POLICYHOLDER/CLAIMANT BENEFITS</strong></td>
</tr>
<tr>
<td></td>
<td>▲ Safety</td>
</tr>
<tr>
<td></td>
<td>▼ Theft</td>
</tr>
<tr>
<td><strong>Accident Response</strong></td>
<td>▲ Service Options</td>
</tr>
<tr>
<td></td>
<td>▲ Insurer Response</td>
</tr>
<tr>
<td><strong>Claims Investigation</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Theft/Fraud Deterrence</strong></td>
<td>▼ Frequency</td>
</tr>
<tr>
<td></td>
<td>▼ Severity</td>
</tr>
<tr>
<td></td>
<td>▲ Satisfaction Scores</td>
</tr>
<tr>
<td></td>
<td>▲ Retention</td>
</tr>
</tbody>
</table>

*Source: Strategy Meets Action 2016*

As shown in Figure 1, the services fall into four main categories, each of which may provide benefits to both policyholders and insurers.
Leveraging the Power of Telematics: Extending the Value Proposition to Insurance Claims

Accident Avoidance

Although safety and loss control measures are not typically considered to be part of the claims function in insurers, the potential for leveraging technology to reduce accidents and the related claims is significant. In the future, there will be even more collaboration between claims and underwriting as the data from telematics is fed upstream to underwriters and loss control engineers. The capabilities enabled by telematics in vehicles include the following:

- **Vehicle diagnostic information**: While the capabilities for tech-driven proactive maintenance are valuable for both personal and commercial lines, it is especially useful for business owners managing fleets. Tracking where vehicles are on the road, recommending servicing/maintenance (including the identification of nearby service centers), and providing alerts for vehicle failure conditions are all important. This will contribute to reduced accidents due to mechanical issues such as brakes, tires, and engine failures.

- **Real-time alerts**: Alerts to avoid accident zones and weather alerts to notify the driver of changing weather conditions provide value to individuals and fleet owners. In-vehicle sensors to identify road conditions (icy, slippery) can be combined with real-time weather from weather services.

- **Drowsy driver alerts**: In-vehicle technology is now available to identify a drowsy driver and generate an audible alarm to keep the driver from nodding off.

- **Distracted driving controls**: Solutions are available to disable texting, e-mail, and other interactions with smartphones that are key causes of distracted driving.

These, in combination with increasingly sophisticated collision avoidance technologies in vehicles, i.e. ADAS (automated driver assistance systems), are expected to go a long way toward reducing vehicle accidents and injuries. The result: clear benefits for vehicle/fleet owners, individual drivers, and insurers.

Accident Response

Vehicle accidents will still occur, even in the longer-term environment where most or all vehicles will be autonomous. Improving the response to accidents and providing more real-time options for services will prove to be extremely valuable.

- **First notice of loss**: For personal lines, many companies already provide a mobile app for the reporting of a claim. But for both personal and commercial lines, the automated collection and reporting of information related to an accident can speed the repair and recovery process.

- **Family/friend notification**: One of the most valuable implementations that fleet owners are considering is the ability to notify relatives and other approved parties that a driver has been in an accident and is not injured, or is injured and being taken to a specific medical facility. This is especially valuable for fleets so that the business owner and family can be notified immediately to take action. This type of notification is very valuable in personal lines as well, and notifications to loved-ones can be used as a selling point to individuals.

- **EMS dispatch**: Detection of a sudden impact, airbag deployment, failed brakes, or a vehicle veering off the road can trigger an automated response to law enforcement or emergency medical responders.

- **Towing/rental services**: Partner networks for towing services, rental cars, or vehicle repair shops can be leveraged to schedule these services in real-time, providing for more rapid response and recovery.

It is well known that rapid response to claims and quick settlements lead to higher policyholder satisfaction and even lower claim payments. Services such as towing and rental can assist in cementing loyalty and increasing retention ratios, and telematics can also stop fraudulent interference from third parties (ambulance-chasers, overpriced towing, etc.).
**Claims Investigation**

Vehicle telematics can act like the black box in airplanes and trains. Regardless of what type of device is used for telematics (technology embedded in the vehicle, OBD device, or smart phone), the information collected can help to determine the facts surrounding the crash, the extent of damage, and the efficacy of the repairs.

- **Accident reconstruction:** Information will include the time and location of the event, vehicle speed, force of impact, airbag deployment, and other factors. When multiple vehicles in the accident have telematics capabilities, an even more complete picture of the accident can be developed. This information can be used to identify the cause of the crash, the at-fault party, and potential driver liability. If audio and video capabilities are also available with the vehicle, the playback can show the actual incident.

- **Injury assessment:** Telematics capabilities can help to determine if passenger death or serious injury was caused by the accident. There have already been cases where the insurer discovered that the driver had a heart attack or seizure that led to the accident. Also, the force and location of the impact can be correlated with the severity of the injury.

- **Repair estimate:** By using vehicle telematics and the sensor network in commercial and personal vehicles, an initial estimate of damage can be executed. For simple claims, this may be all that is necessary to pay and close the claim. For more extensive damage, the telematics and sensor data can be the starting point of the estimate process, which can then be augmented by a visual inspection of the vehicle by an adjustor with the appropriate skills.

- **Repair confirmation:** Both commercial and personal vehicles increasingly have sophisticated sensors and chips built in to assist in vehicle operations and collision avoidance. When one of these vehicles is repaired after an accident, in-vehicle telematics can be used to confirm that expected damage was successfully repaired and all sensors are working properly.

Using the data collected from telematics devices in the investigation and restoration process provides one of the highest potential value areas for the use of telematics in claims, offering invaluable benefits to fleet owners, individual drivers, and the insurance company.

**Theft and Fraud**

Telematics is already used for theft and fraud in various countries around the world (Italy, Brazil, and others), but is not yet widely used yet in North America. Telematics can assist in a number of areas related to theft and fraud.

- **Theft deterrence:** While audible alarms have some value in deterring theft, increasingly sophisticated thieves require additional deterrents. Telematics can support driver verification so that only known operators can start a vehicle. This can be particularly important for high-value and collector cars that are frequently transported to different locations and are thus at an increased risk of being targeted.

- **Vehicle retrieval:** Most consumers and business owners, and certainly the insurance companies that provide theft coverage, would like vehicles to be recovered. Telematics can assist in locating stolen vehicles in those critical early hours after a vehicle is stolen and while it is still in the same general geography as the theft location.

- **Fraud detection for vehicles:** Telematics can locate a vehicle fraudulently reported as stolen that is really hidden in another place.
Leveraging the Power of Telematics: Extending the Value Proposition to Insurance Claims

- **Fraud detection for injuries**: First, telematics can determine if the vehicle was in the location reported for the accident and if the individual that was allegedly injured in the accident was actually in the car at the time. Secondly, the impact and type of the collision can be related to the injury to assess whether the injuries claimed are likely to have been caused by the accident.

- **Cargo theft**: For inland marine, cargo theft is a big concern that can be addressed through telematics. While theft of the vehicle itself is a concern, theft of the trailer and the contents is also a significant problem. Telematics devices on the trailer and within the contents can assist in locating these items after the trailer has been detached from the cab.

It should also be noted that telematics for other types of vehicles and vessels can play an important role in deterring theft and fraud (boats, yachts, light or heavy construction vehicles, taxis, and limos, etc.).

**Implications of Telematics for Claims**

It is becoming increasingly evident that the data that can be collected through vehicle telematics can support a wide range of value propositions, with claims being a significant area of value. Today, many of these capabilities for claims are being piloted or put into use by a small number of insurers, but none have put comprehensive capabilities into the market. These types of capabilities can provide value for insurers of every size. The personal lines segment is poised for the next wave of growth in telematics. The potential for small and medium sized commercial fleets is enormous, especially since the penetration of telematics in this segment is extremely low.

**TECHNOLOGY CAPABILITIES FOR INSURERS**

Telematics holds great promise for improved claims outcomes, both from a consumer and business owner standpoint, as well as from an insurer perspective. However, technology choices are a critical success factor that insurers must plan for as they either implement a telematics program for the first time or as they upgrade capabilities to expand the breadth and depth of telematics.

**Real-Time Data and Data Collection**

The very essence of telematics is “real-time.” For claims operational use of telematics, the real-time nature of telematics data is the business value. Because telematics devices continually transmit data, insurers must be able to receive, collect, and store the data. This most certainly has an impact on data centers due to the enormous volume of data.

A critical decision for insurers is whether to maintain a proprietary data center (or expand one) or to leverage cloud services. Given the exponential growth of sensor-based data, utilizing cloud services should be strongly considered.

One of the stumbling blocks for smaller insurers is the time it takes to collect sufficient data to drive decisions. Working with a technology partner that can bring consortium data to bear on business decisions from the start delivers value sooner.
Leveraging the Power of Telematics: Extending the Value Proposition to Insurance Claims

**Analytics and Insights**

Due to the volume of data produced by telematics devices, analytics are mandatory to sift through the noise to find actionable data and insights. While there are certainly tactical uses for telematics data, like some of those noted in this document, a very significant point of value is finding new insights in the data that can refine or redefine decisions.

Analytics designed specifically for the telematics world accelerates time to business value. While fact-based analytical insights are important, behavioral and contextual insights are highly valuable, and analytics focused on this should be the goal. Insurers should consider whether they can wait to build their own telematics analytics environment or chose to work with a partner with proven telematics analytics capabilities. While any company can collect data, it’s the analysis of the data, with actionable insights, that truly matters.

**Operational Platform**

The high velocity of telematics data requires a platform that is designed for that specific condition. A platform designed for transactional data will not be appropriate for telematics execution. Additionally, a platform that can operate across various telematics devices is imperative. Platforms that limit device choice to one specific device will not be able to keep up with the highly evolutionary world of telematics devices.

**Telematics Solutions**

Insurers should consider device choice as they move forward with telematics adoption. Initial programs were facilitated by devices, usually specific to the insurer, which were plugged into the vehicle’s on-board diagnostic system. These devices are efficient and overcome the objection to smartphone apps – they are always in the vehicle and are not reliant on a driver bringing their phone along for the ride. However, we do live in an app-dependent world, and consumers are comfortable with smartphone applications. Additionally, it is easy to update an app, and it is not easy to send out new pluggable devices.

In the long term, vehicles equipped with embedded telematics and sensors are the future. Vehicle manufacturers are all working on the next best-connected car and truck. This is both good news and bad news for insurers if they are trying to be inclusive of all vehicles’ varying capabilities and technological differences – another case in point for the value of platforms and analytics specific to the telematics environment.

As telematics choices are made, insurers should keep in mind that commercial fleet owners can dictate what employees should do relative to telematics. This is not the case for personal vehicles, where ease of use and individual value derived from telematics which goes past premium discounts will drive adoption. On both sides of the coin, advanced telematics capabilities that support claims-related scenarios will bring about increased value. And that is a win-win.

**OCTO TELEMATICS**

**Company Overview**

Octo is the number one global provider of telematics and data analytics solutions for the auto insurance industry. Founded in 2002, today Octo is the largest and most experienced insurance telematics company in the world, transforming auto insurance through behavioral, contextual, and driving analytics for more than 60 insurance partners. Octo has more than 4.6 million connected users and the largest global database of telematics data, with over 136 billion miles of driving data collected and 358,000 crashes analyzed and reported to the insurance claims department (as of September 30, 2016). Octo applies proprietary algorithms to this market-leading database to deliver powerful new insights into driver risk, informing solutions that benefit both auto insurance companies and policyholders. The company is headquartered in London, with offices in Boston, Rome, Stuttgart, Madrid, and Sao Paulo.
Breadth of Functionality

Octo’s robust portfolio gives insurers the ability to offer solutions to users based on variable risks – for example, a higher risk teen driver may be offered a full telematics solution via Octo SURROUND, while a lower risk driver may be provided with Octo GLIMPSE, offering telematics through the policyholder’s smartphone. Such solutions must also make sense to the policyholder, providing tangible value that pleases them while also aligning with the insurance value proposition. Octo meets the needs of both today’s innovative insurer and their mobile policyholders with both mobile solutions, as well as a robust in-vehicle solution, which provides the full suite of telematics benefits. The suite includes:

- **Octo Glimpse** – This is Octo’s base product. It provides driving behavior scoring with feedback on what behaviors drive the score. It also provides location-based services, for example, road condition alerts or roadside assistance. Personalized driving logs and trip views add a personal benefit to the consumer. This product works on Android and iOS, and connectivity is through the policyholder’s smartphone with the Octo Glimpse mobile app.

- **Octo Vantage** – This product has all the services mentioned above and some enhancements. Examples are location services which include time services and personalized driving logs which include fuel efficiency. Also included is vehicle maintenance notification. The most significant difference is that this product includes risk event detection and notification relative to the vehicle operation. These all provide value-added services for the customer. Connectivity is via a dedicated device integrated with Bluetooth and paired with the policyholder’s smartphone.

- **Octo Surround** – This is the most comprehensive of Octo’s products. It also builds upon the functionality of Vantage and Glimpse, but it adds innovative and critical capabilities around crash dynamics (the facts of the crash), detection, and notification. Additionally, it provides automated claims notification and claims initiation, literally jump starting first notice of loss. These capabilities directly correlate to the claims applications detailed in this perspective. Connectivity is via a dedicated device and Octo-provided cellular connectivity.

- **Octo Fleet** – This is a complete commercial line solution based on in-vehicle ELD devices. With an interactive console, Octo Fleet allows fleet managers to better supervise vehicles and the business. Customers benefit from an Electronic Logging Device (ELD) onboard each vehicle that collects data for accurate reporting and increased efficiency. Octo Fleet allows customers to manage drivers, costs, and vehicle optimization, assess driver behavior, and view vehicle location, usage, and mileage. Vehicle monitoring and alerts, preventative maintenance monitoring, and emergency and breakdown services also extend the life of the fleet. With Octo Fleet, customers maximize efficiency, reduce costs, and increase profits.

While telematics has been traditionally used for market segmentation, pricing, and underwriting, Octo has been focused on maturing telematics in other directions. Telematics and device capabilities are continually evolving. Octo has engineering and R&D staffs that focus on the “next best thing” in the device space to keep their offerings relevant and to improve business outcomes. Claims utilization of telematics data has been a focus in 2016, not only from the perspective of understanding crash and fraud scenarios, but also to facilitate claims adjusting capabilities such as damage estimation and crash site analysis.

To assist medium and small insurers that may be totally new to telematics, Octo provides an end-to-end solution that addresses all aspects of running a UBI program. In addition, Octo offers a program that helps the insurer understand how their customer base stacks up against the database of drivers. This allows the insurer to benchmark their proposed program against other programs already in the market, thereby reducing suboptimal outcomes. Insurers can contribute data to the driver database and utilize the data, and they do not have to pay for the data they use (all data submitted and analyzed is anonymized).

STRATEGY MEETS ACTION COMMENTARY

Telematics adoption is critical for insurers, on multiple levels. For personal lines, telematics is the foundation of an important product offering that still has growth potential. On the commercial fleet side, there is likely to be a great impact on insurers offering that product line since it is virtually an untapped segment. However, the true value is in the data. Being able to leverage the data across claims and on into risk analysis and risk management will be critical. While the largest insurers may have resources to develop and manage a robust telematics program, for most insurers, partnering with an expert telematics organization will be imperative. Telematics data volumes and data quality takes a long time to develop. With the time-frame for driver-based innovation across product, price, underwriting decisioning and claims operationalization rapidly compressing, finding current sources of the data, coupled with telematics device expertise and an R&D capability is critical, yet difficult to find.

Telematics device evolution and proliferation is another reason that partnering is critical. No one device is perfect for each person, nor appropriate for every business application, particularly in claims. Working with a provider that can virtually be device agnostic means that insurer products and programs will remain relevant and flexible. As insurers look to gain new insights and business capabilities in claims operations, Octo’s current work in this area can be leveraged to put an insurer down the road to business value. Octo’s long heritage in telematics, insurance expertise, proven results over time, and with varying insurer segments puts them on a short list of telematics technology providers for insurers to consider.

ABOUT STRATEGY MEETS ACTION

Strategy Meets Action (SMA) is dedicated to helping the business of insurance modernize, optimize, and innovate for competitive advantage. Exclusively serving the insurance industry, SMA blends unbiased research findings with expertise and experience to deliver business and technology insights, research, and advice to insurers and IT solution providers. By leveraging best practices from both the management consulting and research advisory disciplines, we take a unique approach – offering an unrivaled set of services, including retainers, research, consulting, events, and innovation offerings.

This perspective is based on SMA’s experience, research, and insights. Octo Telematics has purchased the distribution rights to this research and perspective. This is not paid-for research.

Additional information on SMA can be found at www.strategymeetsaction.com.

Mark Breading, SMA Partner, can be reached at mbreading@strategymeetsaction.com or 614-562-8310.

Follow Mark on Twitter @BreadingSMA.

Karen Pauli, SMA Principal, can be reached at kpauli@strategymeetsaction.com or 774.462.7820.

Follow Karen on Twitter @kpauliSMA.