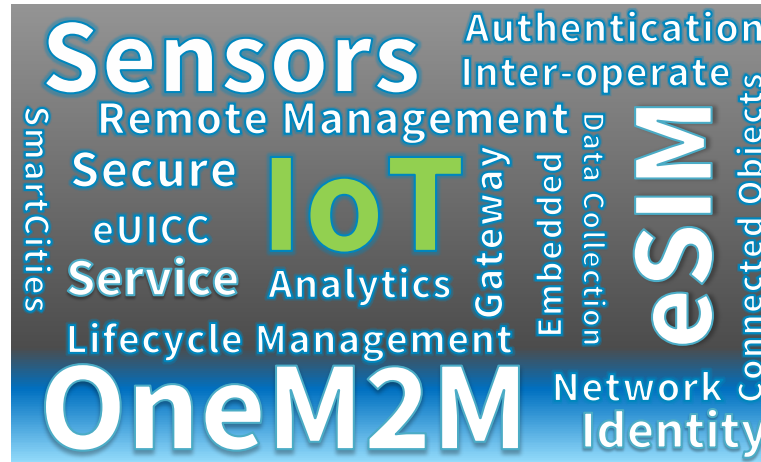




Presentation Title
Insurance Telematics Innovation

Presentation to
Industry Partner

Presentation by
[Sensorise Octo Solutions]
[4May2020]



SENSORISE
Connect & Serve

Customer and Agenda

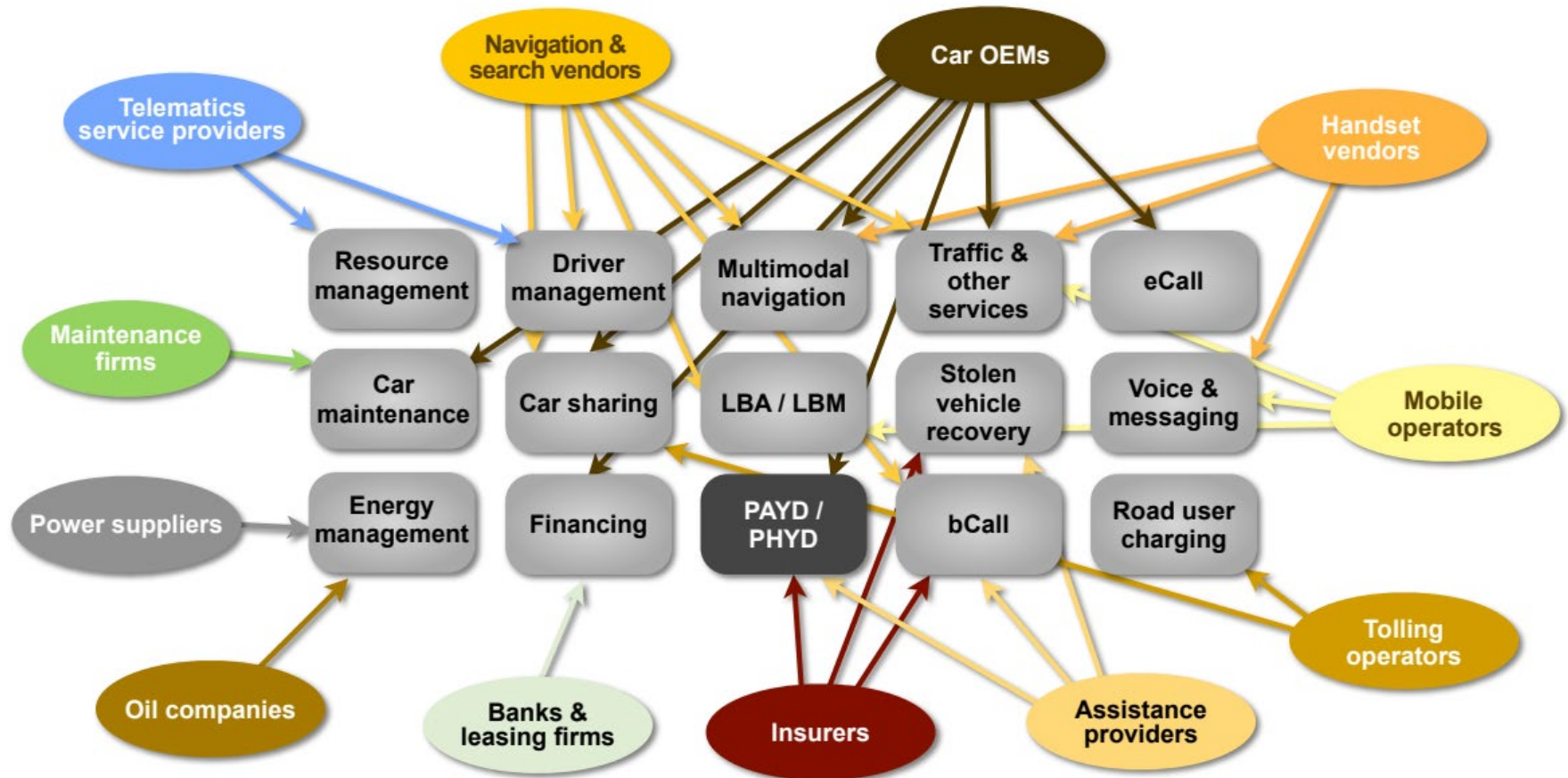
- "Over time the IoT is going to be very much like the fabled elephant — that it will be much, much bigger than any of us can imagine it being today."
- Tyson Tuttle, CEO of Silicon Labs, 2014

International Business
Awards 2019:
Sensorise: Most
Innovative Telecom
Product & Services

- Background
 - The Rise of Insurance Telematics
 - Recent Automotive Insurance Trends
 - Sensorise & Octo – comprehensive and compelling proposition
- Sensorise Octo Proposition
 - Digital Driver – the Sensorise disruption
 - Proposition and Differentiators



Insurance telematics is getting busy!!



Source: PTOLEMUS,
 LBA: Location-based Advertising; LBM: Location-based Marketing PAYD: Pay As You Drive
 insurance; PHYD: Pay How You Drive insurance

Choice of the device is an important Criteria!



Source: PTOLEMUS,
 LBA: Location-based Advertising; LBM: Location-based Marketing PAYD: Pay As You Drive
 insurance; PHYD: Pay How You Drive insurance



Recent Insurance telematics trends

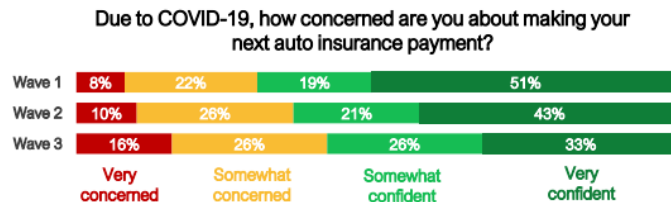
Claims management and FNOL is improving thanks to telematics

The paradigm of insurance has evolved from cure to care

The impact of the TBYB model

- Try Before You Buy (TBYB) is one of the fastest growing model for advertising, selling and distributing insurance while scoring the driver before it enters the risk portfolio. It is also very often the first serious step into UBI for insurers that do not have a defined UBI strategy.
- By providing a free trial showing how risky the driver is, it is used to appeal to new customers, to collect data on them and potentially convert them.
- Benefits for finishing the trial can be easily tailored based on personal criteria, measured risk and further monitoring

COVID-19 could be the take off point for UBI



40%

Would **shop in a matter of weeks** if they were to lose their primary source of employment

+2.5x

Likely to **cancel policy** to manage costs (+5m PIFs) ⁽¹⁾

Thinking longer-term...

57%

Think their **miles drive will remain lower** for a significant period of time after COVID-19

+2.9x

Increase in **willingness to use telematics / UBI** programs (+37m PIFs) ⁽¹⁾

...how do consumers view rates if miles driven remain lower?

42% concerned about the next auto insurance payment

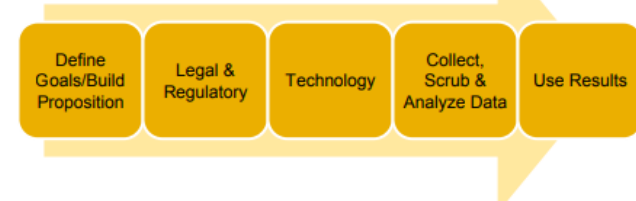
290% increase in customer consideration of UBI



Customers & Companies love the UBI COncept!

Understand it and like to control their premium	<ul style="list-style-type: none"> Consumers don't like the use of credit scores because it doesn't make sense. Generally speaking, "good" drivers opt in, get participation discounts, and have the opportunity for even greater discounts
Want access to useful driving feedback	<ul style="list-style-type: none"> Accidents are the leading killer of teens. UBI programs give parents a variety of tools to help monitor and counsel their teen drivers. Many adults are faced with elderly parents whose driving is deteriorating. UBI can help evaluate skill deterioration and provide helpful safety tips
Like options for value-added services	<ul style="list-style-type: none"> Consumers generally like options Programs vary from basic to deluxe in their service offerings. Some consumers really like the added services
Value companies that are "green"	<ul style="list-style-type: none"> Society is becoming increasingly environmentally conscious, and consumers value companies that are "green" Younger consumers like new and different products even when the product may not appeal to them

UBI Go to Market Pre-requisites



Critical Success Factors

- Product Must appeal to Customers
- Self Selection, Device options
- Better Pricing, Claims Handling
- Regulatory Compliance
- Data & Data Science Management
- Risk Reduction

Better pricing	<ul style="list-style-type: none"> The predictive power of the telematics data is undeniable Initial programs included relativities from .39 to 1.09 on top of the existing rating plan, highlighting the additional segmentation power
Product differentiation & brand awareness	<ul style="list-style-type: none"> Some programs are very basic discount programs that will appeal to price sensitive groups. More sophisticated programs add a wide variety of value-added services that differentiate the product UBI programs promote the idea that the company is "modern" and "green"
Reduced loss costs	<ul style="list-style-type: none"> Consumers understand UBI, so there is a significant self-selection effect Behavioral modification programs have been shown to significantly reduce risky driving and, consequently, accident frequency Potential for further reduction by using data in claims handling
Consumer satisfaction and retention	<ul style="list-style-type: none"> Consumers want to pay less for their insurance, and this gives discounts that only their current carrier can offer (as others don't know their driving behavior) Ancillary services (e.g., teen tracking) greatly appeal to certain consumers and make the insurance product more valuable to them Retaining existing customers is significantly cheaper than adding new ones

Credit: Towers Watson

The best brands in India trust Sensorise



Octo is the global insurance tech leader



OCTO IS THE NUMBER 1 GLOBAL PROVIDER OF TELEMATICS AND DATA ANALYTICS SOLUTIONS FOR THE AUTO INSURANCE INDUSTRY

#1

Globally



31%

Market Share



\$35bn

Market opportunity



5.6mm

Connected users



248bn

Miles of driving data



464k

Crashes analysed



The major players profiled in the Usage-based insurance market include Metromile Inc., Progressive Casualty Insurance Company, Nationwide Mutual Insurance Company, Liberty Mutual Insurance, Octo Group S.p.A, AXA, and Aviva, among others.





Commercial vehicles dominate the ubi market

- Sensorise connects more than 400K Commercial Vehicles in India
- Sensorise has the customer touch point as the agency responsible for customer KYC
- Sensorise has been managing billions of data packets containing telematics data
- Sensorise as a business partner is not just about the cutting edge and proven technology sets, its also about getting into revenues

vehicles and on-road. The on-road vehicle segment dominated the UBI market in 2018. It is due to the fact that majority of vehicles on-road don't support

By technology, the usage-based insurance market is segmented as OBD-II, smartphone, embedded system, black box, and hybrid. The telematics

to opt for insurance plans that are usage-based. The commercial vehicles dominated the UBI market in 2018. The growth is attributed to the fact that the

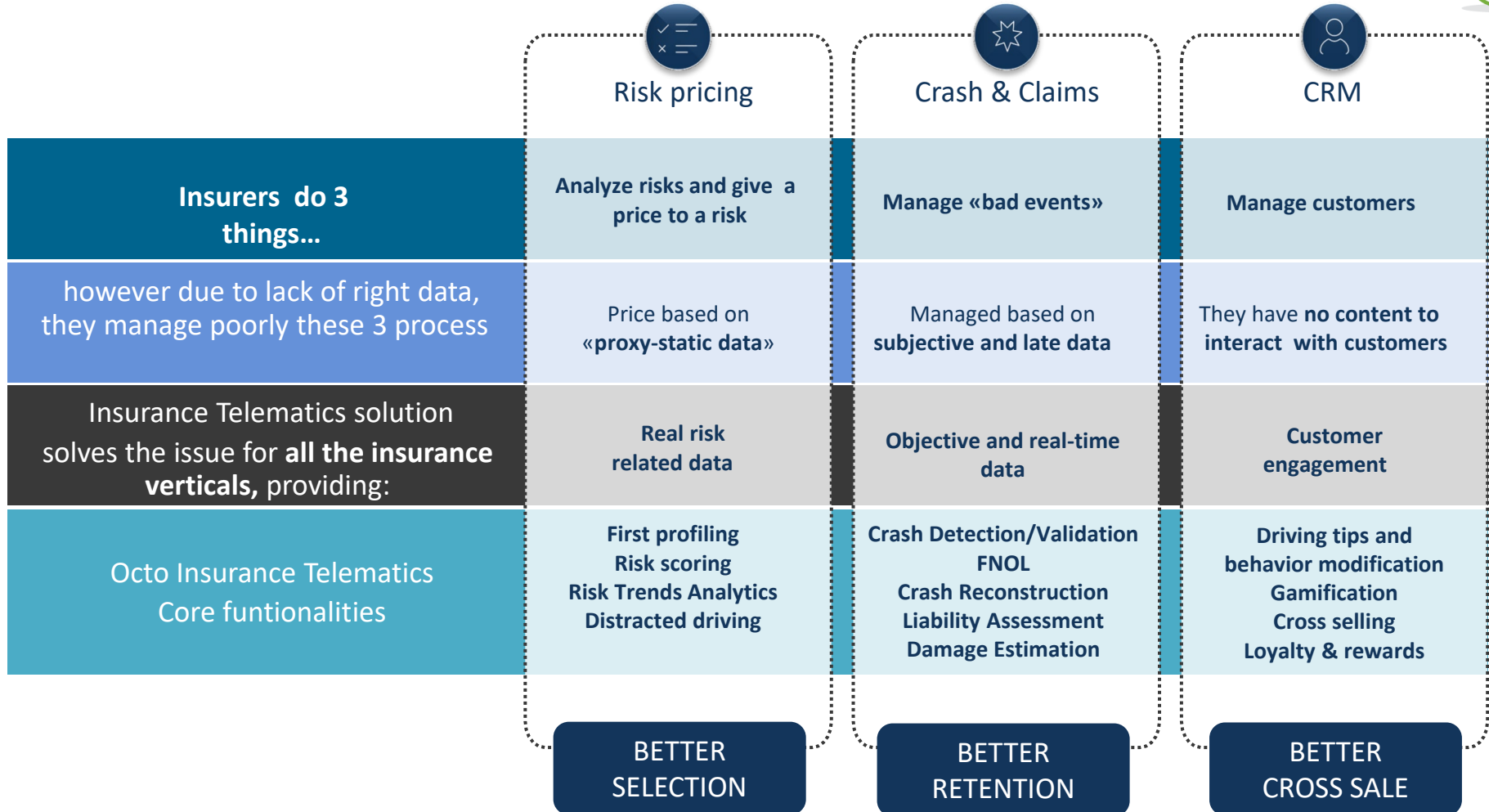
The usage-based insurance market is projected to grow at a CAGR of 34.78% to reach US\$45,311.046 million by 2024, from US\$7,559.693 million in 2018.

Insurance Telematics

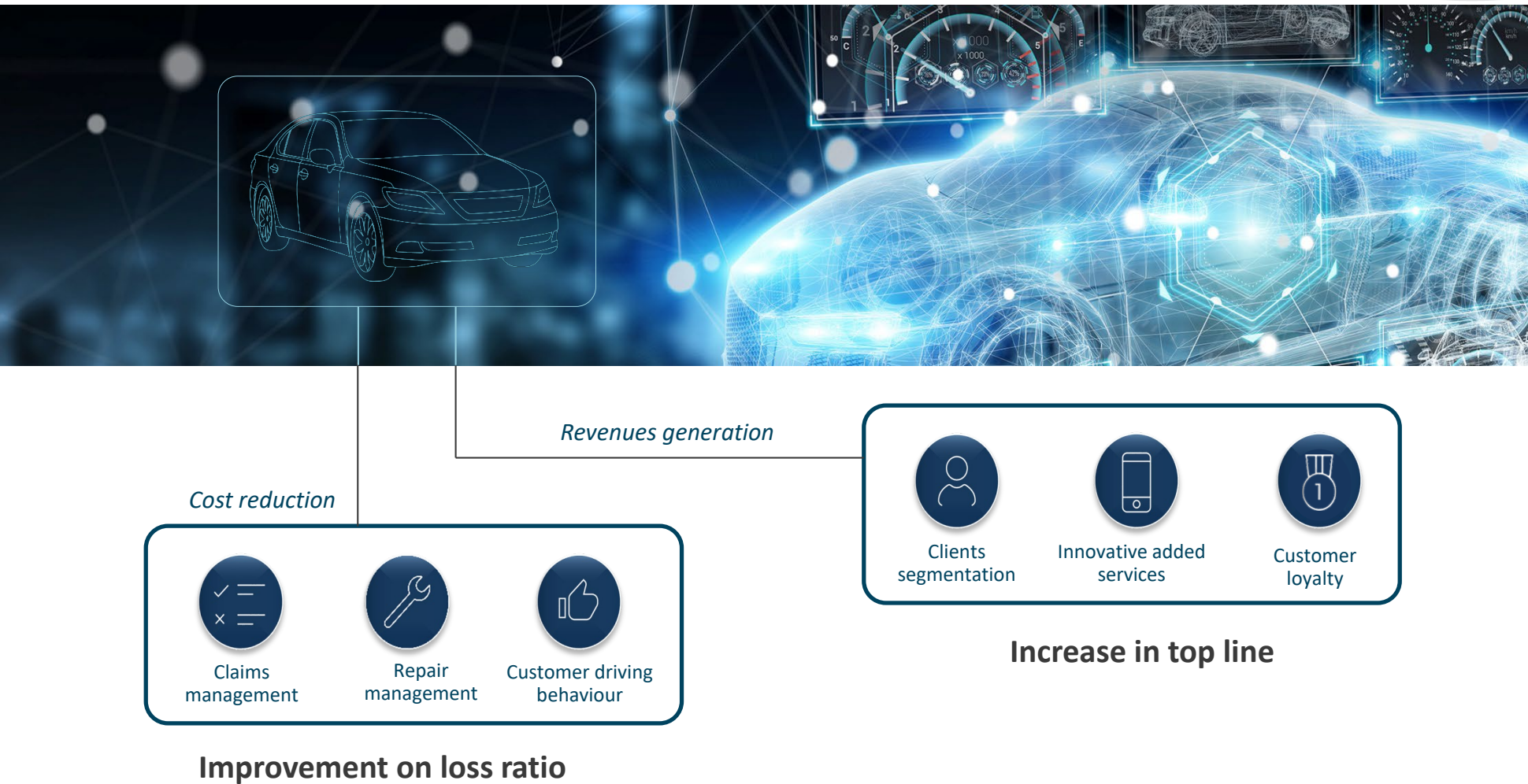
The Insurance Service Provider Agenda



Insurance Telematics Proposition



driving improved results for Insurers



Insurance Telematics

Comprehensive portfolio of Sensorise Octo Solutions and Services



Proven UBI Offering

2008

Started scoring driving data for our first panel of insurers

27

Insurers have had us provide scoring

≈600k

Vehicles scored since inception

5

Continents represented in our data pool

Billions of Miles



of granular telematics collected, pooled, and analyzed

Insurance Data



Policy and Claims data from each vehicle allows analytical score development and rate plan optimization

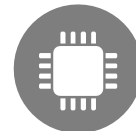
External Data



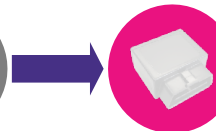
appended to our data to add contextual information



Technology companies connected to platform already (including 6 preferred providers)



Hard Install Device



On-board Diagnostics (OBD) Device



Smartphone App



Smartphone with Tethering



Connected Car Programs

#1

Globally



5.6mm

Connected users



248bn

Miles of driving data



456k

Crashes analysed



Digital Driver App is designed to transform every smartphone in a telematics device and interface with customer engagement features.

Services and functionalities portfolio is made wider if the app is paired either with a BLE Smart Tag, OBD2 or Hardwired BlackBox



Individual Telematics Scoring:
it provides to the Company's IT system the risk level assigned based on the telematics data collected.



Loyalty, Rewards:
a rich loyalty & rewards configurable system inside the app will help Insurance to engage and retain the end users, keeping them active through gamification that enhances the customers' experience.



On Map trip path:
end user can view trips on a map with details in terms of date, time, start and end address, trip score and trip duration.



Distracted Driving:
acting on those elements that significantly distract the driver (e.g. talking on the mobile phone...) such feature has the purpose to increase drivers' safety as well as decrease the risk for Insurance.



Driving Habits:
historical statistical information related to Time, Distance, Place and allows to acquire primary set of information to shape the driver's mobility



Scoring Statistics & Trends:
End User can view statistical data regarding the overall score, habits and behaviour on weekly basis.



Gamification:
such feature allows Insurance to incorporate playful and motivational elements into a learning system to increase user engagement in different ways: Challenges, Ranking and Experience Levels.



Auto Start & Stop:
the App works in the background without human intervention, mixing the motion coprocessor technology with GPS related information.



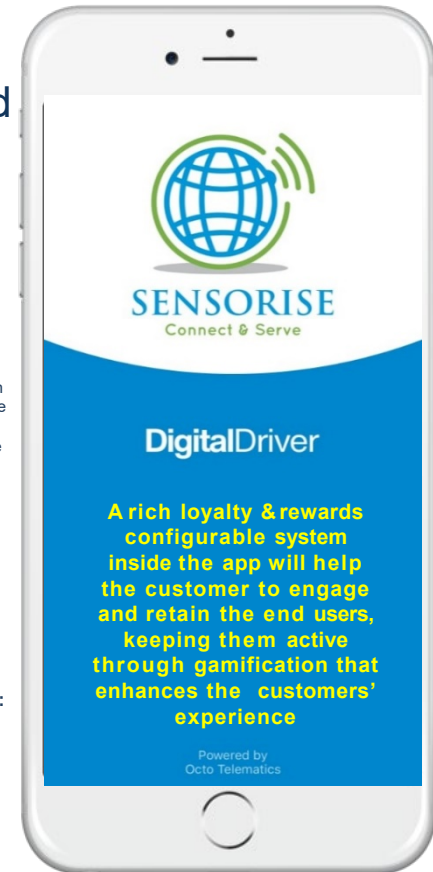
Roadside Assistance:
it's a manual-triggered request for assistance by an occupant of a vehicle and it can be provided through a push button integrated in the App.



Driving Behaviour:
based on detection of the following event types: harsh accelerations, harsh braking, speeding and cornering.



Tips, Alerts & Education:
the app will provide customised driving tips based on the users' driving behaviour and habits



Digital Driver/3 Editions

App Edition



Your simple mobile solution

- Driver behavior scoring
- Driver feedback
- Location-based services
- Personalized driving logs and trip views
- Reservation
- Registration
- Billing

Smart Tag Edition



Easy to use car solution

App Edition features plus:

- Fleet management console
- Enhanced data monitoring and reporting
- Fleet performance optimization
- Stolen vehicle recovery
- Real-time driving data and events
- Crash detection and notification
- Proactive FNOL and claim initiation

Hardwired Edition



Your complete professional solution

Smart Tag Edition features plus:

- Theft Management
- Live tracking
- Historical tracking
- Engine unlock
- Open/ close doors*
- General car status check*
- Fleet monitoring*
- Management console*
- Control room console
- Reporting console*
- Call center console*
- Viewer console*
- Marketing console*

*only with device

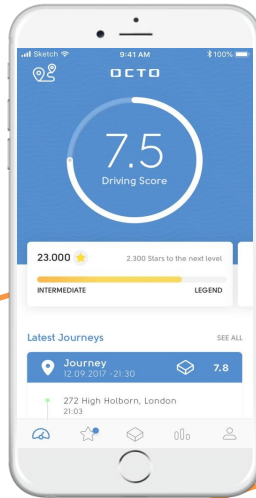
Over 464k crashes verified, analyzed and validated by multidimensional analysis



Digital Driver/3 Editions to build your product

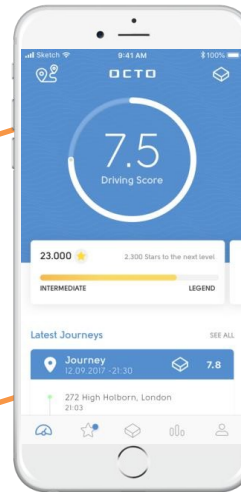
Use Cases

Big Value, Low cost!
Driver Behaviour!
Any Device!
Ready now!



Smartphone Edition

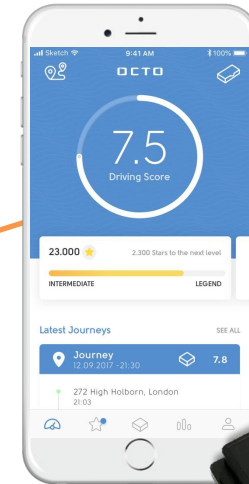
Deep App Integration!
Crash Detection!
Plug & Play BLE Device!
2 Year Life!!



Smart Tag Edition



Full Vehicle Control!
Theft Protection!
High End Device!
Car Battery powered!

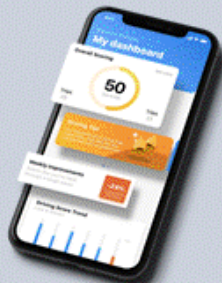


Device Edition



#Services

Our portfolio includes scores which are used by many insurers to differentiate between different risk profiles.



Data Driven Score

is an entry-level score based on **Driving Habits** and **Driving Behavior** events and presented to end-users on a mobile App or Web portal.



Crash Score

The Crash Score is based on **predictive modelling** techniques using Crash data as target variables and therefore represents a Crash propensity measure for each driver.

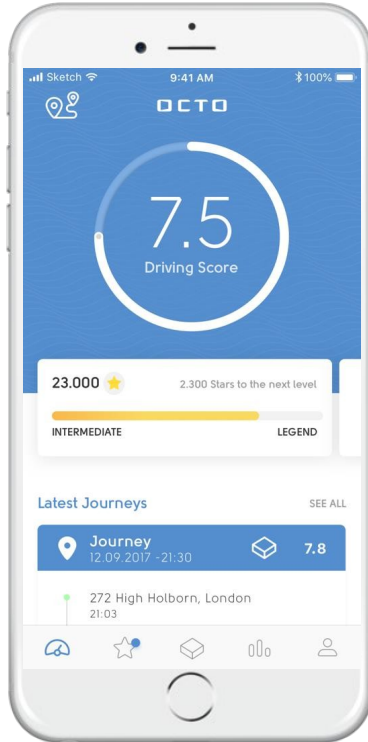


DriveAbility®

Our market-leading score is based on actuarial science and makes use of telematics data, context data and insurance **claims and policy data**. The DriveAbility® score is an indicator that predicts the likely loss costs of an individual driver.

Multiyear and multi-geography experience in supporting **UBI programs** (i.e. Pay as you Drive, Pay how you Drive,)

Digital Driver/Smartphone Edition



Driving Behaviour:
based on detection of the following event types: harsh accelerations, harsh braking, speeding and cornering.



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Loyalty, Rewards:
a rich loyalty & rewards configurable system inside the app will help Insurance to engage and retain the end users, keeping them active through gamification that enhances the customers' experience.



Emergency call
it's a manual-triggered request for assistance by an occupant of a vehicle and it can be provided through a push button integrated in the App.



Scoring Statistics & Trends:
End User can view statistical data regarding the overall score, habits and behaviour on weekly basis.

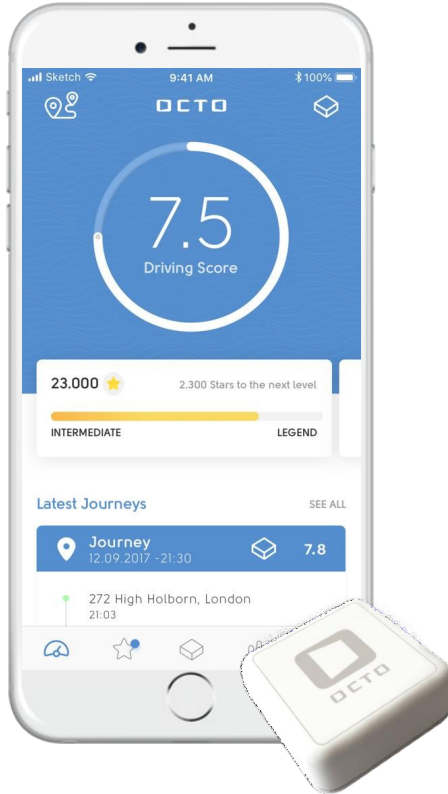


Tips, Alerts & Education:
the app will provide customised driving tips based on the users' driving behaviour and habits



VALUE PROPOSITION

Version to enable crash detection in a plug&play approach; this edition relies on different sensors specifically mounted in the tag



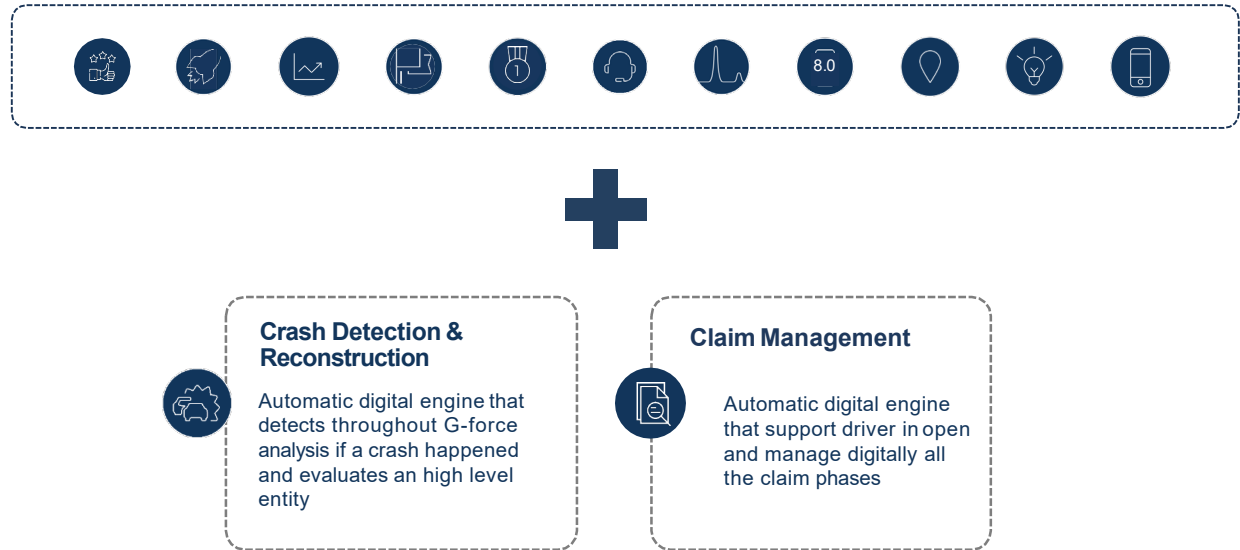
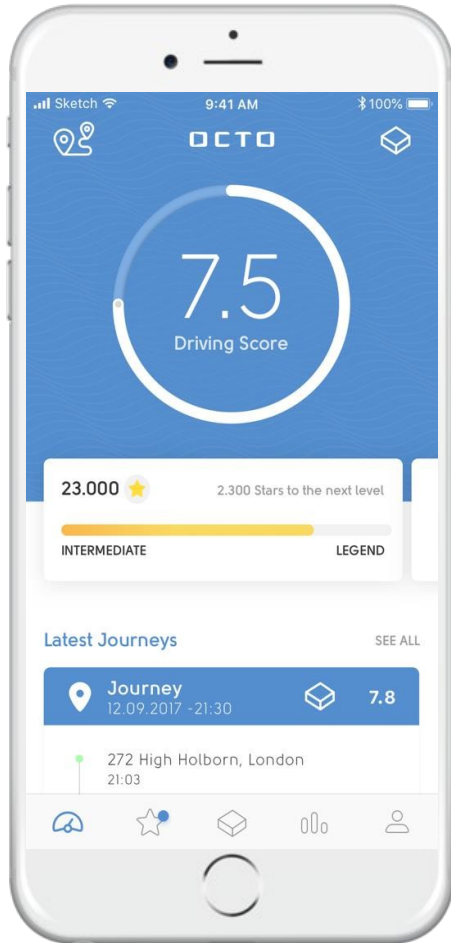
MAIN HIGHLIGHTS

- Crash detection
- Higher reliability of monitoring
- Plug & play approach throughout tag installation and pairing
- Every trip is detected associating car to driver (his own phone)



POINTS OF ATTENTION

- Monitoring correctly enabled after tag pairing and installation





VALUE PROPOSITION

Version to enable a full telematics scenario connecting a specific box directly to car battery



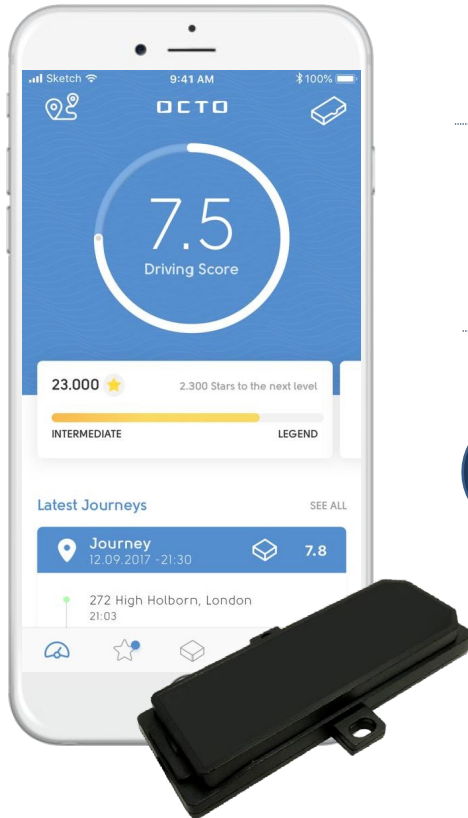
MAIN HIGHLIGHTS

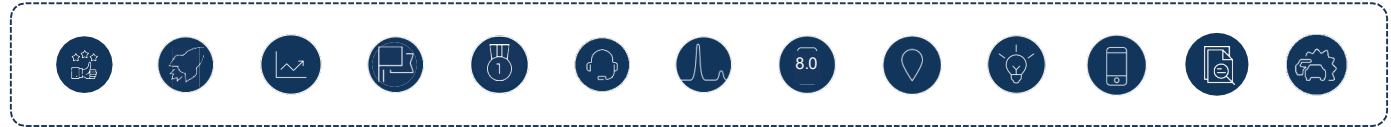
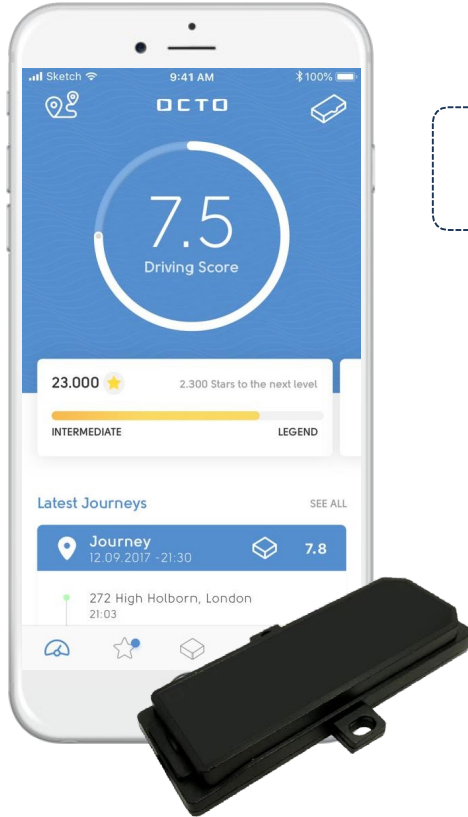
- The highest reliability of monitoring
- Enabling VAS (Value Added service)
- App independent (it could work without association to the app)



POINTS OF ATTENTION

- Installation to be done directly on the car battery (assisted or at the garage)
- Only the car is monitored (no certification with current driver)





Geo fencing for marketing

According to car localization is possible to provide driver with customized marketing communication.



Speed limit

Speed analysis engine that support driver in respecting limits



Car finder

Car localizer to support the driver to get back the car

Parameters that define Penalties &Score

Scoring

1.0

10.0

Score is calculated by **subtracting penalties** from max score:

Penalties for:



Speedings



Harsh
Accelerations



Harsh
Braking



Harsh
Cornering



Driving
at Night



Driving in
Bad weather



Driving in
Heavy Traffic



Speeding Event

- Speed value in two consecutive trip points is bigger than allowed value. The severity depends on difference between allowed and actual value
- The severity and duration of speeding events is reflected in "speeding penalty"



Harsh Accelerations Event

- Acceleration is calculated using two consecutive trip points. The value is calculated by dividing the change of speed by time
- The severity and duration of acceleration events is reflected in "acceleration penalty"



Harsh Breaking Event

- The breaking event is detected when acceleration is negative. The value is calculated using the formula described in "harsh acceleration"
- The severity and duration of braking events is reflected in "braking penalty"



Harsh Cornering Event

- System calculates change of velocity (vector value that describe speed and direction). Then it divides that vector by time (in seconds) and takes the scalar value as a final result (which is in m/s^2)
- The severity and duration of cornering events is reflected in "cornering penalty"



Driving at Night

- System check for sunrise and sunset time at the specific day and location (it use starting point). It assume that trip was made during night, when at least one point of a trip was recorded before sunrise or after sunset. In that case the overall penalty is multiplied by 1.25
- The overall penalty is used to calculate final score (10 - "overall penalty")



Driving During Bad Weather

- The system checks road conditions and calculates average impact value - average value weighted by distance for ice, snow, fog and rain.
- The impact value is used to increase penalty for detected events.



Driving in Heavy Traffic

- The system takes into account different levels of traffic (jam factors from low to blocked) to calculate impact value which is used to multiply overall penalty. The impact value is average value of jam factors weighted by distance.
- The impact value is used to multiply overall penalty. The overall penalty is used to calculate final score (10 - "overall penalty")

The Distracted Driving module currently detects **5 types of distractions** that occurred during a particular trip:



Hands-free Call



Regular Call



Unlock



Handling



Waking up



We count the number of distractions for each trip, and each distraction has a start time and an end time.



Distractions don't impact on neither a user's trip score or global score, and don't generate any penalties.

The scoring algorithm for distracted driving is still under development.

Distracted Driving Module

The Distracted Driving feature monitors events that could significantly distract the user whilst driving, i.e. call on the mobile phone.

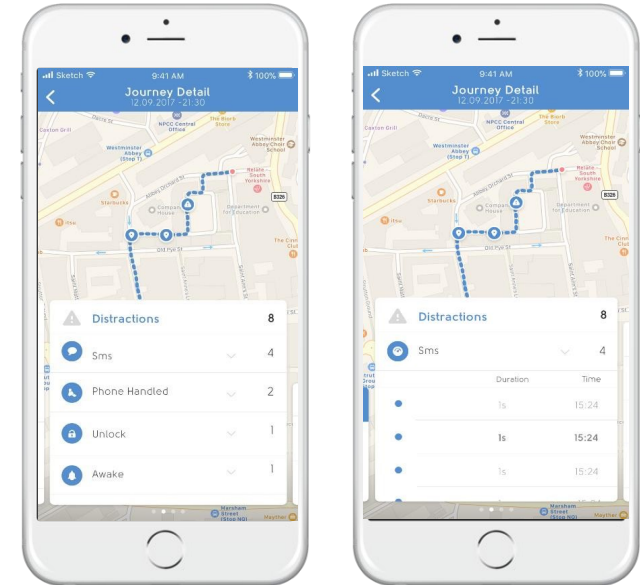
The user will see the detected events as distracted driving events on their trip map, with designated symbols.

Benefits for Insurance Companies

- Monitor list and types of distracted driving events during a user's trip, helps profile a user's risk factor
- Completes events and trip scoring, as an additional indicator
- Promote better and safer driving

Benefits for Policy Holder

- Become a better and safer driver



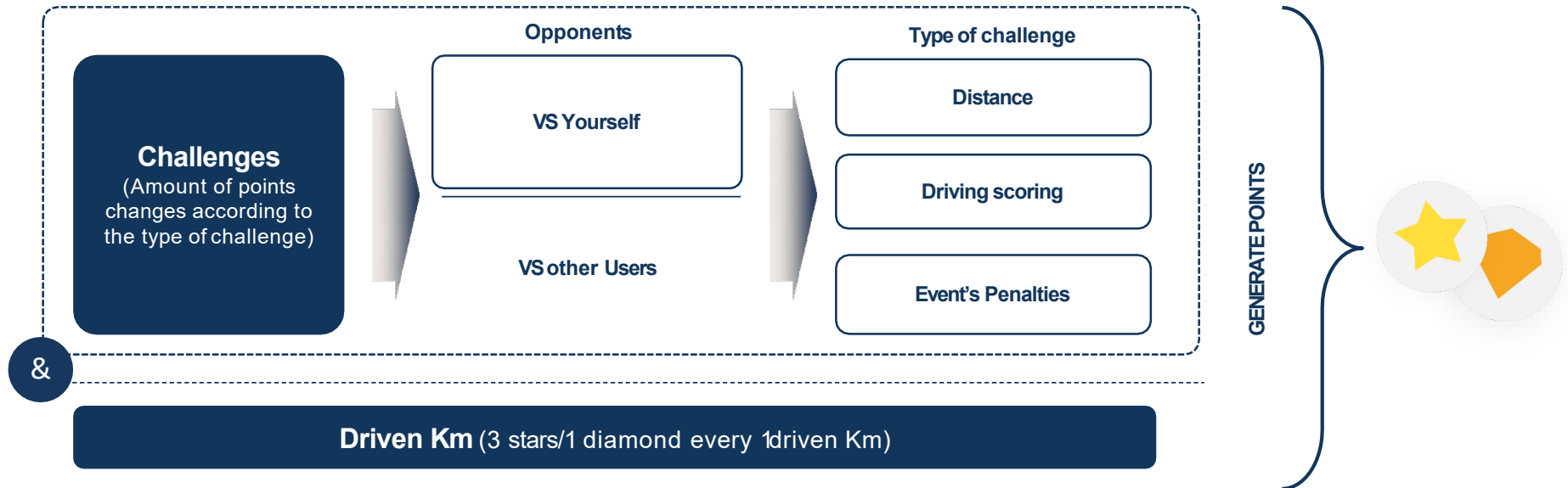
Gamification, Challenges and Rewards Dynamics

Challenges & Rewards/ Points System

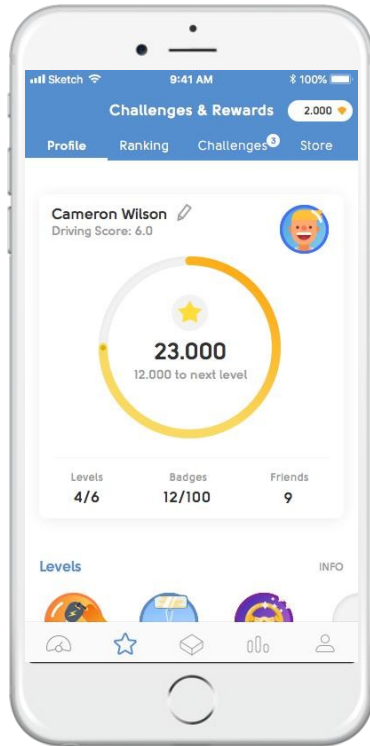
There are two type of points:



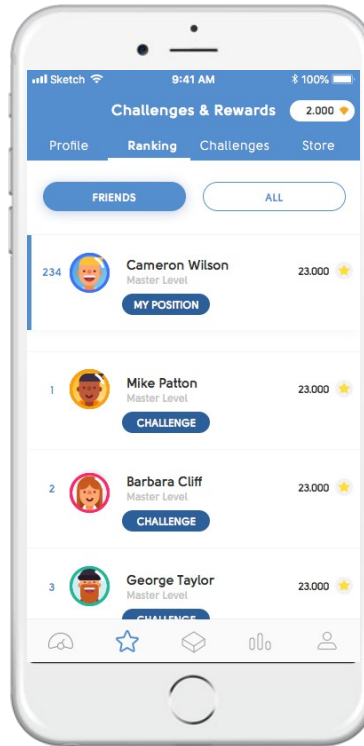
Users earn point by driving and by taking parts in challenges.



Challenges & Rewards/ Profile & Ranking



Profile



Ranking

Users can access the Challenges and Reward section tapping the star on the main tab menu. The first screen will be the Profile, while tapping on the top tab bar they can navigate through the Challenges and Reward sub-sections:

- Ranking
- Challenges
- Store

Thank You!

Connect & Serve

For More information

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Contact:

sales@Sensorise.net