The North American Connected Insurance Observatory

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Founder and Director, Connected Insurance Observatory
@mcins_

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About me

Matteo Carbone
Founder and Director of the Connected Insurance Observatory

+11 years strategic consulting
(former Principal with Bain & co.)

Keynote speaker and writer on insurance innovation

Global InsurTech Influencer
(1° InsurTech Influencer by InsurtechNews,
Top 5 InsTech Influencer by InstechLondon,
Top 3 InsurTech Influencer by Right Relevance;
Top 5 IoT Influencer by Postscapes,
Top 25 Disruptors in the Insurance Industry by Vertafore)

• The Insurance think tank started in Europe on 2016 aggregating almost 30 international insurance groups, institutions and tech firm

• The initiative delivers three concrete outcomes:
  – the most pragmatic multiclient research specialized on the insurance IoT domain
  – one-to-one workshops dedicated to each member to discuss the research outcomes
  – plenary symposiums with all the members together around the same table
I have recently contributed to relevant papers on the new connected insurance paradigm.

Connected Insurance is about connecting an insurer with its clients and their risks.

**Connected Insurance**

Any insurance solution based on sensors for collecting data on the state of an insured risk and telematics for remote transmission and management of the data collected.

- Auto
- Home...
- Health
- Life
- Industrial risks and specialty lines
The Observatory provides to the participants the best knowledge available worldwide on Connected Insurance

<table>
<thead>
<tr>
<th>Observatory’s goal</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scouting and structuring qualitative knowledge on Connected Insurance</td>
<td>1. Collection of <strong>evidences</strong> concerning connected insurance approaches</td>
</tr>
<tr>
<td>Sharing a critical point of view of key trends and spreading innovation culture</td>
<td>2. <strong>Researches on consumer expectation</strong> and on distribution of connected insurance products</td>
</tr>
<tr>
<td>Encouraging stakeholders discuss experiences and exchange ideas about innovation</td>
<td>3. Best practice analysis with market <strong>benchmark</strong> and international <strong>innovation scouting</strong></td>
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<tr>
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<td>4. <strong>1to1 deep dive meetings (workshops) with each Insurance Company</strong> to present and discuss the evidence of the research</td>
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<tr>
<td></td>
<td>5. <strong>Three annual collegial events</strong> in order to share with Observatory’s Stakeholders ideas and experiences on connected insurance</td>
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</tbody>
</table>

The current participants to the European Connected Insurance Observatory 2017 edition

**Re-Insurers**
- Swiss Re
- Munich Re
- RGA
- SCOR

**Insurers**
- AXA
- IMA Assistance
- Chiara Assicurazioni
- Zurich
- Allianz Worldwide Partners
- AVIPOP (AVIVA)
- Sara Assicurazioni
- Reale Group
- Chubb
- Helvetia
- Cattolica Assicurazioni
- Groupama
- UnipolSai
- Cardif

**Techs**
- Guidewire
- Octo Telematics
- Aubay
- Cloudera
- Sysdata
- Do Different
- Vodafone

**Others**
- Portolano
- AIBA
- InsurtechNews
The Connected Insurance Observatory started in March the North American operations.

The two Observatories together will create an impressive opportunity to cross-fertilize the insurance innovation thoughts across geographies.

More than 25 members have already joined the 2017 edition.

12 members have already joined.

Ten months dedicated to study and discuss the Connected Insurance opportunity.

We are starting the one to one meeting and continuing in parallel the onboarding of the members.
A senior and world-renowned Advisory Committee supports the activities of the North American Connected Insurance Observatory

Steve Anderson  
President,  
The Anderson Network

Paul Carroll  
CEO,  
Insurance Thought Leadership

Antonio Derossi  
Managing Partner Insurance at  
Propeller Venture Capital

Anne Melissa Dowling  
Former Director,  
Illinois Department of Insurance

Mike Scrudato  
SVP Strategic Innovation Leader,  
Munich Re America

Ujjval Patel  
Vice President - Research & Strategy  
ACORD

Connected insurance is about **value sharing**

1. **Benefits on the insurance bottom line**  
   - Improve insurance profit & loss through specialization and share part of this value with the customer

2. **Frequency of interaction**  
   - Enhance proximity and interaction frequency with the customer while creating new customer experience and offering additional services

3. **Knowledge creation**  
   - Create and consolidate knowledge about the risks and the customer base

4. **Sustainability**  
   - Perform a new virtuous role for society by providing positive externalities for a sustainable society

Source: Connected Insurance Observatory
The IoT is definitely relevant for the North American insurance sector

"Do you think that connected insurance will be a relevant technology for the North American insurance sector?"

7% no
93% yes

46% A new paradigm
54% An incremental innovation

Source: ACORD members, February 2017, 156 answers

Auto telematics is the most mature use case and the area where the benefits have been already identified

% of high relevance on total respondents*

<table>
<thead>
<tr>
<th>Industry</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto</td>
<td>90%</td>
</tr>
<tr>
<td>Health</td>
<td>40%</td>
</tr>
<tr>
<td>Home</td>
<td></td>
</tr>
<tr>
<td>Life</td>
<td></td>
</tr>
<tr>
<td>Industrial risks and specialties</td>
<td></td>
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</tbody>
</table>

Market maturity

<table>
<thead>
<tr>
<th>Phase</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Incubation</td>
<td>First pilots focused on one use case</td>
</tr>
<tr>
<td>Exploration</td>
<td>First pilots, roll out by few pioneers, pilot phases by greatest part of players by using a &quot;me too&quot; approach</td>
</tr>
<tr>
<td>Learning</td>
<td>Only few top players understand telematics full potential (UW, claims, VAS), define their own approach (e.g. big data) and push the selling phase, differentiation of the commercial offers</td>
</tr>
</tbody>
</table>

Source: ACORD members, February 2017, 156 answers
The North American market looks at the first steps of the telematics adoption

"How do you judge the motor telematics level of maturity in the US market?"

<table>
<thead>
<tr>
<th>Incubation phase</th>
<th>Exploration phase</th>
<th>Learning phase</th>
<th>Growth phase</th>
<th>Maturity phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>14%</td>
<td>36%</td>
<td>31%</td>
<td>19%</td>
<td></td>
</tr>
</tbody>
</table>

- **First pilots** focused on one use case
- **Roll out by few pioneers**
- **Pilot phases** by greatest part of players by using a "me-too" approach
- **Only few top players** understand telematics full potential (UW, claims, VAS), define their own approach (e.g., big data) and push the selling phase
- **Commercial offer differentiation**
- **Telematics potential fully understood and increased commercial push by all players**
- **Differentiated solutions / providers over top players**
- **Telematics approach is the standard for the insurance business**
- **Relationship consolidation between top players and providers, best practices cross-country diffusion**

Source: Connected Insurance Observatory

The customer are ready. Are you?

"How likely would you be willing to agree to have a black box fitted in your car or a driving app on your smartphone that would track position and driving behaviors in order to receive services and a discount on your auto insurance premium?"

Source: Connected Insurance Observatory, SSI
Also when it works well, it will not happen overnight

<table>
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<th>Learning phase</th>
<th>Growth phase</th>
<th>Maturity phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Does the approach make sense?&quot;</td>
<td>&quot;What is the ROI of the use case?&quot;</td>
<td>&quot;What is the best way to do it at my company?&quot;</td>
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</tbody>
</table>

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Auto insurance: the customer’s wishes

- **Saving**
  The price is the main driver for choosing the insurance product for more than 50% of the customer base

- **Claims support**
  Claims interaction, though infrequent, is the moment of Truth

- **Additional services**
  60% of customers would value a platform for services beyond insurance coverage

Source: Connected Insurance Observatory/SSI; Bain/Research Now NPS survey
A tale from a market where telematics come to age

“Hi Genie, I’m a prudent driver”

“For my first wish, I would like to save money on my auto insurance coverage”

“It’s done, you have 25% discount on your premium installing a small device on your car”

“OK Genie, for my next wish, I want a better support if I’ll have a crash”

“Your wish is granted, you will have a real time assistance and the automatic claim filling”

“OK Genie, for my last wish, I want you to make more convenient the journey with my car”

“It’s done, you have 25% discount on your premium installing a small device on your car”

“Your wish is my command, you have a suite of services based on the telematics data”

Telematics, what am I talking about?

**Telematics device**
Blackbox to be installed on top to the battery for all the year (self-installing)

**Insurance coverage**
Auto liability insurance coverage with 25% up-front flat discount

**Services**
Bundle of services with an annual fee charged to the customer (50€)

This is the typical product on the Italian market
### The business case for the client

#### Auto insurance premium paid

<table>
<thead>
<tr>
<th>Premium Range</th>
<th>Insurance market</th>
<th>Telematics policies</th>
</tr>
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<tbody>
<tr>
<td>&gt;900€</td>
<td>13%</td>
<td>17%</td>
</tr>
<tr>
<td>600-900€</td>
<td>34%</td>
<td>35%</td>
</tr>
<tr>
<td>400-600€</td>
<td>48%</td>
<td>40%</td>
</tr>
<tr>
<td>200-400€</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>&lt;200€</td>
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<td></td>
</tr>
</tbody>
</table>

#### Starting, Discount, Discounted, Client fee, Final Price

<table>
<thead>
<tr>
<th>Premium Range</th>
<th>Starting price</th>
<th>Discount</th>
<th>Discounted price</th>
<th>Client fee</th>
<th>Final Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;900€</td>
<td>1250 €</td>
<td>- 312 €</td>
<td>938 €</td>
<td>50 €</td>
<td>988 €</td>
</tr>
<tr>
<td>600-900€</td>
<td>300 €</td>
<td>- 75 €</td>
<td>225 €</td>
<td>50 €</td>
<td>275 €</td>
</tr>
<tr>
<td>400-600€</td>
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### Italian insurers have shaped the drivers’ journey and improved their customer experience with a suite of services

- **While driving**
  - Weather alert based on geo-localization
  - Road or medical assistance via dedicated button

- **In case of crash**
  - Simplified claim notification, including automatic form fill-in based on telematics data
  - Claim certification at client's disposal

- **When parked**
  - Stolen vehicle recovery
  - Bodyguard for emergency outside the car when parked
  - Antitheft service if the box is removed/uninstalled
  - Alert in case the car is hit when parked
  - Alert in case the vehicle is moved when the engine is off (e.g. tow-away)

**NOT EXAUSTIVE**

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Source: Connected Insurance Observatory
Auto telematics come to age on the Italian market

Telematics penetration on total auto insurance contracts

- The bigger auto insurance player has a penetration >35%
- A couple of competitors shows penetration higher than 20%

What about the insurer’s perspective?

Source: Connected Insurance Observatory, SSI
Telematics on the Italian market have an impressive self selection effect (acquisition of low risk clients)

**RISK SELECTION**

MTPL claims frequency -20%

Source: ANIA (2014 data), Connected Insurance Observatory

What about the insurer’s perspective?

Source: Connected Insurance Observatory, SSI
Material benefits achievable using the telematics data on the claim handling process

**LOSS CONTROL**

MTPL average claim cost
-7%

+100% Insurer's body shops usage
+5% speed settlement

-11% material damage costs
-18% body injuries incidence

Source: Connected Insurance Observatory

What about the insurer perspective?

More than 60% of the Italian telematics volumes have an yearly service fees to the customers (50-100€ charged to the client)

Source: Connected Insurance Observatory, SSI
The telematics portfolio shows a higher persistency

MTPL churn rate -25%

Mobilizing more use cases based on the telematics data the benefits generated on the bottom line are larger than the discount and the telematics costs

Value creation levers (use cases) Costs

| RISK SELECTION |_low risk customers acquisition and connected reduction in fraudulent intents | 25% discount on auto insurance premium and 50-100€ as yearly telematics costs |
|LOYALTY AND "BEHAVIOR-STEERING" | Loyalty systems based on detected customer driving behavior | LOYALTY AND "BEHAVIOR-STEERING" |
| | Positive behavior reinforcement | 25% discount on auto insurance premium and 50-100€ as yearly telematics costs |
| | Gamification |  |
| RISK-BASED PRICING | Usage-Based Insurance pricing definition process based on "quantity" and "level" of risk exposure |  |
| SERVICES... | Concerning policy information |  |
| | Having high value added for drivers |  |
| | Related to insurance cross-selling and products connected to the insurance contract |  |
There are examples where the behavioral change was already exploited

*Discovery created a reward model extremely relevant on the South African market and it is scaling at international level*

*Discovery integrated connected insurance in their loyalty and behavioral change program*
Apple Watch is becoming one of the key element of the Vitality approach

Employees can order Apple Watch through Vitality for an activation fee of $25 plus tax. The amount they pay for their Apple Watch thereafter is based on the number of workouts they complete in a calendar month.

Apple Watch will help your employees achieve their weekly Vitality Active Rewards targets by measuring daily activity, allowing them to earn Vitality Points on the Vitality Today app.

Employees who achieve their fitness targets will fund their Apple Watch.

Watch repayments linked to engagement

Source: Discovery

The Vitality approach is based on an engagement finalized to improve the technical results

Source: Discovery

- Members engage in their health and wellness
  - Healthier members stay
  - Members change their behavior
  - Members achieve improved health outcomes
  - Insurer invest part of the actuarial profit into incentives
  - Insurer/employers experience better profitability (ie. claim performance)

- Members are rewarded for their improvements
- Members achieve improved health outcomes
- Insurer invest part of the actuarial profit into incentives
- Insurer/employers experience better profitability (ie. claim performance)

- Comprehensively integrated insurance products, attractive discounts and incentives, broader wellbeing tools.
- Obese receive non-refundable premium discounts from integrated products, and the higher the members participate in certain activities, the higher the value of the integrated products.
- Discovery’s products attract healthier lives, which have a positive selection effect and lower the risk profiles of the business.

Vitality encourages positive behavior change. A direct, positive correlation exists between better health outcomes and lower claims costs.

Insurer/employers save per patient and length of stay are significantly lower for patients who engage in fitness activities.

- Members who engage with the Vitality programmes have lower hospitalization rates, lower the risk profiles engage in the programme.
- The longer duration members are engaged, the better for the insurer and the more they reduce the impact on morbidity and mortality rates.
- Positive selection by tapping off unhealthy lives.

* *Vitality Impact Board Study* source of study
The Vitality approach is based on an engagement finalized to improve the technical results.

Behavioral changes improve the health technical profitability.

Source: Connected Insurance Observatory

Source: Discovery
Better technical profitability on group business

Larger employer group claim experience

High
Low engagement, high claims

Claims incidence

Low
High

Source: Discovery

Behavioral changes improve the life technical profitability

Mortality rates q(x)

1/3 lower

Source: Discovery
The Vitality approach is based on an engagement finalized to improve the technical results.

Connected insurance is a journey, not a destination.

**CONNECTED INSURANCE STRATEGY**

**VALUE PROPOSITION**

**EMBEDDING CONNECTED INSURANCE IN THE ORGANIZATION**

Set strategic goals/ambition for the introduction of connected insurance

- User experience
- Pricing approach
- Value added services
- Loyalty systems and "behavior steering"

- Hardware and data gathering approach
- Make vs buy decisions
- Enablers (process and tools)
- Effectiveness and readiness of organization
- Implementation and continuous improvement

Source: Connected Insurance Observatory
Feel free to contact me to join the journey of the **North American Connected Insurance Observatory**

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