

# InsurTech HUB România

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# Summary

- Challenges & stages for an InsurTech HUB – OECD perspective
- EIOPA InsurTech Task Force (ITF)
- Big Data – first thematic review of ITF
- Romanian InsurTech HUB – objectives, members

# InsurTech's challenge

- Fast innovation in the insurance sector presents numerous benefits to consumers...
  - Lower costs driven by improved efficiency, transparency, and disintermediation
  - Increased accessibility driven by improved mobility, speed, and user interface
  - Customer centric new products
- ...but also risks to consumer protection that need to be managed
  - Data protection, cyber attacks, discrimination, disengagement, etc...

# Encouraging responsible innovation at each stage of development

- Idea stage
  - Promote the generation of ideas
- Compliance stage
  - Facilitate the process of compliance
- Implementation stage
  - Test how the idea works in practice
- Expansion stage
  - Facilitate expansion to all market

# Idea stage

- Networks or forums
  - Exchange ideas for applications and initiate research
  - Share emerging trends
  - Facilitate synergies (e.g. incumbents and start-ups)
  - Identify regulatory barriers
- Support units
  - Encourage innovation in a specific area
- Hackathons
  - Brainstorming to solve specific market problems

# Compliance stage

- Innovation hubs
  - Support to identify relevant regulation
  - Support in how to comply with regulatory requirements
  - Hub and spoke model
  - Dedicated advisers

# Implementation stage

- Regulatory sandboxes
  - Test new ideas in a controlled environment
  - Provides feedback to adapt idea or regulation
  - Entry requirements include that an idea is innovative and that consumers will benefit
- Types of flexibilities offered
  - Temporary license or exemption
  - Non-applicability of certain rules
  - Tailored regulations
- Consumer protections maintained
  - Suitability rules
  - Access to redress
  - Qualification requirements



# Expansion stage

- Exchange platforms
  - Share information on emerging trends, risks and regulatory issues
- InsurTech bridges
  - Fast-track sandbox applications
  - Assistance to understand the markets, opportunities and rules
  - Facilitate joint innovative projects



# Challenges

- **Mandate of oversight body**
  - How does promoting innovation fit?
- **Keeping up with innovation**
  - Knowledge, identifying barriers and how regulations should apply
- **Structural issues**
  - Financial institutions-focused regulation, local ownership, paper requirements
- **Institutional culture**
  - How to promote a culture of innovation outside of hubs?
- **Consistency**
  - Interpretation of regulation, variety of InsurTech
- **Capacity**
  - Demand for regulatory support may exceed supply

# Key to success: Engagement

- Capacity
  - Resources and networks
  - International approach
- Consistency
  - Consistency in the application of regulation
  - International cooperation to limit regulatory arbitrage
- Culture
  - Organisational support and buy-in
  - Adaptability to change

# ITF EIOPA

- ❑ **InsurTech** means technology-enabled innovation in (re-)insurance, regardless of the nature or size of the provider of the services.
- **InsurTech activities:**
  - Big Data
  - Innovation Facilitators
  - Licensing requirements and regulatory barriers to financial innovation
  - Cloud Computing
  - Convergence on supervision of algorithms
  - Insurance value chain and new business models arising from InsurTech
  - **Innovation Hub**, to establish a structured framework where NCAs and InsurTech firms would regularly exchange experiences and provide guidance in the area of financial innovation including applicable European regulatory requirements.
  - RegTech
  - Distributed ledger technology (DLT) / Blockchain

# Big Data

- **“Predictive analytics”**, - finding patterns and correlations between large, and often diverse, datasets and thereby make predictions.
- Methods used to produce and process large amounts of different types of data (**“Volume”**) with high velocity (**“Velocity”**) from a high number of various sources (**“Variety”**). two more Vs: **Veracity** and **Value**. Veracity refers to the trustworthiness of the data used and Value to the ability to turn Big Data into a recognisable value for the company and/or the consumers.
- GDPR uses the term **“automated decision-making”** (see for instance Article 22 GDPR).
- **“One of the greatest values of Big Data (...) is derived from the **monitoring of human behaviour, collectively and individually**, and resides in its predictive potential”**, EDPS Opinion 7/2015
- **Use of data in insurance**
  - the ways in which data is generated, collected, stored, and processed is growing at unprecedented rates
- **Data has always been collected and processed by insurance undertakings to inform underwriting decisions, to price policies, to evaluate and settle policyholders' claims and benefits, as well as to detect and prevent fraud**

# GDPR effect on InsurTech

- **Insurance undertakings use most of the six legal grounds under Article 6 of GDPR to lawfully process data:**
- **Consent** [Article 6(1a) and Article 9(2a)] e.g. for processing sensitive data such as health data.
- **Contractual obligation** [Article 6(1b)], e.g. to process data both at the pre-contractual stage to give consumers an insurance quote for a requested product and during the performance of the contract, ie for benefits payment in a property insurance contract.
- **Legal obligations** [Article 6(1c)], e.g. to process data in compliance with rules imposed by Solvency II, the Anti-money Laundering Directive, or any other European or national legislation.
- **Legitimate interests** [Article 6(1f)] e.g. to process data for fraud prevention and detection purposes, including the sharing of data for fraud prevention and risks assessments in some cases allowed by the law. This principle needs to be balanced with fundamental rights of people and ensure that they do not result in consumers being treated unfairly.
- Considering **consumer profiling and automated decision-making**, the GDPR introduces new provisions in Article 22. The Article 29 Data Protection Working Party "Guidelines on Automated individual decision-making and Profiling for the purposes of Regulation 2016/679" clarify these provisions.

# Key opportunities and challenges arising from Big Data

Personalised products and services based on own needs and characteristics  
Better customer experience  
Empowerment  
Addresses information asymmetry/transparency  
Enhanced competition: reduced prices  
Risk mitigation and prevention

## Opportunities for consumers

## Challenges for consumers

Financial inclusion or exclusion?  
Price optimisation: fair treatment of consumers?  
Data accuracy and spurious correlations  
Privacy issues and data ownership  
Non-digital population left behind  
Less comparability of (individualised) products and prices  
Supervision of algorithms

Cost efficiency  
Enhanced risk assessments  
“Regtech”  
Targeted and individualised advertising  
Improve their customer’s experience  
Direct access to customers (disintermediation)  
Fight against fraud

## Opportunities for industry

## Challenges for industry

New competitors: defeat or ally?  
IT Flaws  
Cyber risk  
Access to data: data oligopolies?  
Employment  
Legacy issues  
Insurance business model to be re-thought?  
Fragmentation of the value chain

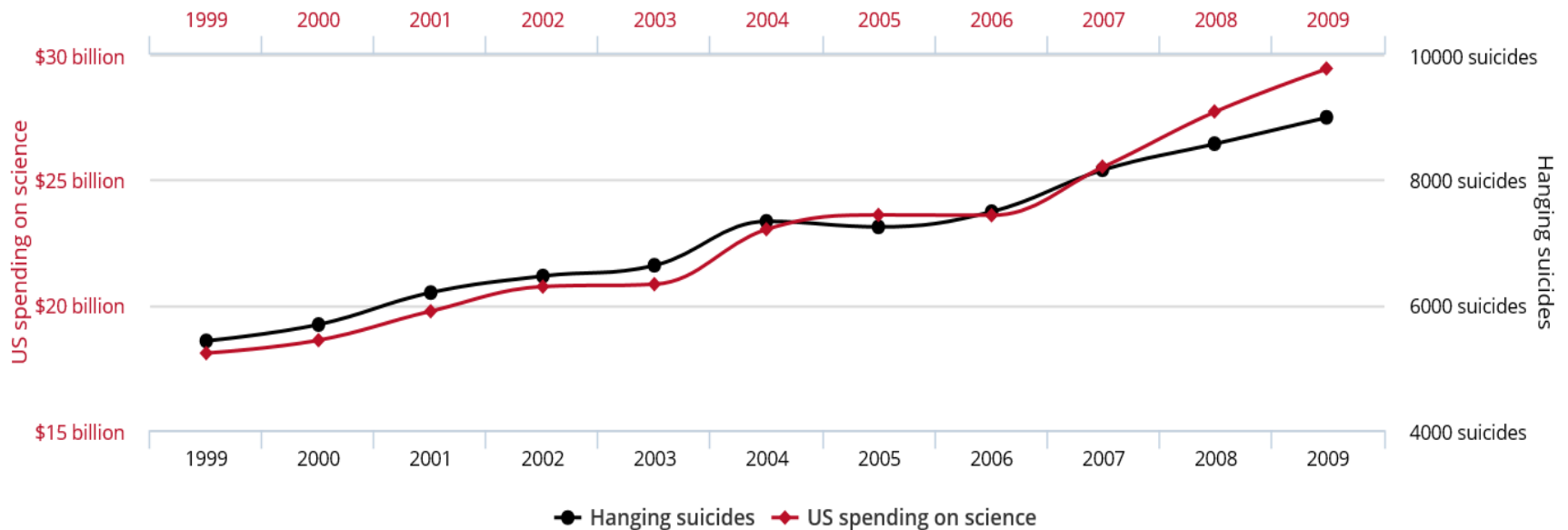
Source: EIOPA



# Correlation is not causation

## US spending on science, space, and technology correlates with Suicides by hanging, strangulation and suffocation

Correlation: 99.79% ( $r=0.99789126$ )



Data sources: U.S. Office of Management and Budget and Centers for Disease Control & Prevention

tylervigen.com

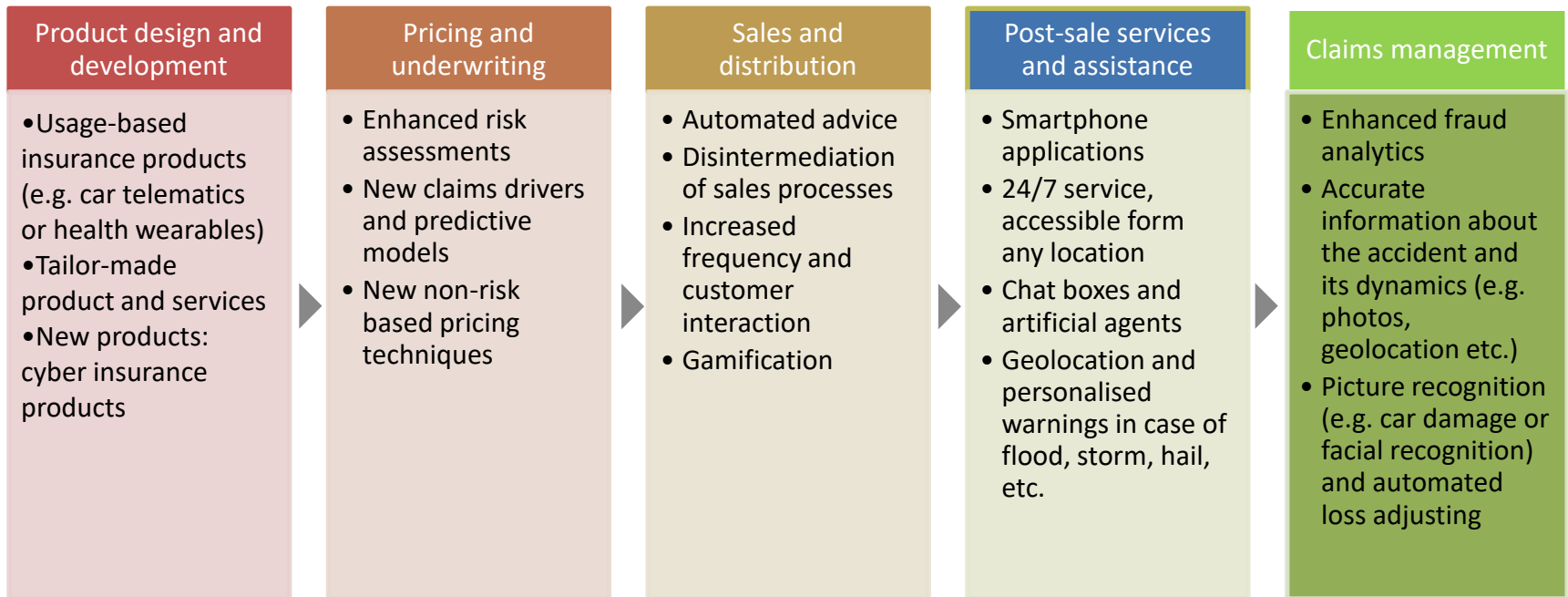
Source: EIOPA InsurTech Roundtable, presentation by Actuarial Association of Europe



# New types of data enabled by digitalisation

Type of data	Example
IoT sensor data	Driving behaviour (telematics), physical activity and medical condition (wearables), surveillance (smart home)
Online media data	Web searches, online buying behaviour, social media activities
Insurers' own digital data	Interaction with insurers (call centre data, users' digital account information, digital claim reports, online behaviour while logging in to insurers' websites or using insurers' app)
Other digital data	Selfie (to estimate biological age for life insurance), flight information for flight delay insurance
Genetics data	Predictive analysis of a person's genes and chromosomes

# Example Big Data impacts all the stages of the insurance value chain



Source: EIOPA

# InsurTech HUB Romania

## OBJECTIVES

- Presenting the best practices in the field;
- Stimulating innovative technologies favorable to consumers; developing regulation and supervisory resources and the development of the insurance market;
- Monitoring of innovative technologies development from the perspective of:
  - the current regulations and those required to be applied in the future;
  - the conduct of companies that promote such solutions and
  - the conduct of entities that use innovation technologies and solutions.
- Supporting innovative technologies development in a controlled and consumer-friendly manner with the protection of their rights and interests from the perspective of digital identity, dematerialized assets and personal data.

# InsurTech HUB Romania

## ACTIVITIES

- Proposals to support innovative technologies in insurance, including the required regulation;
- Providing ASF's support to insurance undertakings, technology companies and hubs to understand and enforce the regulation;
- Supporting the application of Artificial Intelligence, guidance and recommendations through Artificial Intelligence and Robotics;
- Facilitating collaboration with the insurance / reinsurance market entities to exchange information on technological issues that support better regulation;
- Publishing information, recommendations.

## MEMBERS

- ASF;
- Insurance undertakings;
- Insurance intermediaries;
- Relevant insurance and IT associations (UNSAR, UNSICAR, CCPA, PRBAR, ANIS, CLUJ IT, ATIC, ANSSI etc.)
- Interested IT companies (MATRIX ROM, SMART TECH ALLIANCE, TREMEX etc.)

# InsurTech HUB Romania

**InsurTech Platform – available from May 14<sup>th</sup>, 2018**

<https://insurtech-hub.asfromania.ro>

The platform has the following features:

- Facilitating the exchange of information and ideas, specific to the field of technological innovations, between information technology companies, ASF and insurance undertakings;
- Implementing a knowledge warehouse on the use of emerging technologies in the insurance sector;
- Assessing of insurance market needs that can be addressed through the use of technology (questionnaires, case studies);
- Collecting InsurTech project proposals, validating them by ASF and promoting them, as appropriate, to the insurance undertakings and intermediaries.

# Thank you!

# Questions?