

# EIOPA thematic review on the use of Big Data

A summary of EIOPA's recent work on Big Data

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In July 2018, the European Insurance and Occupational Pensions Authority (EIOPA) launched an EU-wide thematic review on Big Data. This includes a survey on the use of Big Data that a sample of insurance undertakings have been asked to complete.

The review is a follow-up to the cross-sectorial review of the use of Big Data by the Joint Committee of the European Supervisory Authorities (ESAs)<sup>1</sup> that was published in March 2018.

## Joint Committee Report on Big Data

The Joint Committee issued a Discussion Paper on the use of Big Data by financial institutions in December 2016. The [final report](#) was published in March 2018 following a review of 68 responses from stakeholders (which are available on the European Securities and Markets Authority (ESMA) website).

The report covers a number of areas, including:

- Description of the Big Data phenomenon
- Whether or not it would lead to a level playing field and fair competition
- Impact of Big Data on financial inclusion, comparability of different products and services, and pricing practices
- Potential shortcomings in the transparency of Big Data tools
- Data quality and fair and transparent use of data collected
- Cyber risks
- Regulatory and legal issues
- Other potential benefits and risks
- Barriers to the use of Big Data

The report also included some preliminary conclusions. It noted that it *“appears that most stakeholders agree that the use of Big Data has the potential to create numerous opportunities to offer consumers a better quality of products and services as well as*

*benefits for financial institutions, provided that the key risks are adequately addressed”.*

It also noted that *“some facets of the risks posed by the use of Big Data techniques are beyond the mandate of the ESAs even when such techniques are used by financial institutions”.* However, the ESAs also noted that they would *“stand ready to support any initiatives by the data protection supervisors to provide guidance to the market on the applicability of the data protection requirements to Big Data applications in the financial sector”.*

The report discussed the various pieces of European data protection, cybersecurity and consumer protection legislation that was already in place or that was planned to come into effect at the time of publication.

Finally, the report discussed some good practices for financial institutions using Big Data. These include robust Big Data processes and algorithms, consumer protection, and disclosure on the use of Big Data. For the latter, it noted the need to ensure transparency towards customers and to *“contribute to the promotion of public awareness, consumer education on the phenomenon of big data and of consumers rights related to the use of Big Data by financial institutions”.*

## EIOPA Thematic Review

The purpose of EIOPA's [thematic review](#) is to gather empirical evidence on the use of Big Data by insurance undertakings and intermediaries in the following areas:

- Pricing and underwriting
- Product development
- Claims management (including fraud prevention)
- Sales and marketing

This particular review specifically focuses on the motor and health insurance markets, yet should have much wider appeal to other types of insurers given the generic nature of much of the content. It is intended to:

<sup>1</sup> The European Banking Authority (EBA), the European Securities and Markets Authority (ESMA) and EIOPA

- analyse the potential benefits and risks arising from Big Data both for the industry and for consumers.
- assess new business models and data quality issues
- enhance the understanding of new types and sources of data and data analytics tools
- identify possible required supervisory and regulatory actions

There are three different surveys for insurance undertakings (industry survey), [National Competent Authorities \(NCAs\)](#) and [Consumer Associations](#) respectively.

EIOPA intends to collect survey responses in July and August and to publish its main findings in Q1 2019.

## Industry survey

The EIOPA [industry survey](#) asks insurance undertakings and intermediaries a number of questions on their current and expected medium term use of Big Data, including the following:

1. Which types of data are used and where this data is sourced. The types of data listed are categorized as “traditional sources of data” and “new data sources” such as sensor data, online media data and other digital data.
  2. Which Data Analytics tools and techniques are used, which cloud computing services are used and if there are any obstacles to the use of such services.
  3. Which areas of the insurance value chain has Data Analytics most impacted, with some free form sections asking for an overview of the use in some of these areas, and some specific questions on things like robo-advisors, mobile phone applications and various types of claims management and fraud prevention.
  4. Various requests for detail in relation to motor and health insurance pricing and underwriting, and some questions on the influence of Data Analytics on things like segmentation and rating factors used.
  5. What the main potential benefits for the organisation are from using Big Data.
  6. What the main challenges of using Big Data are.
7. Some further questions focused on particular challenges such as data quality, ethical considerations and transparency.
  8. A freeform question about the role large “Tech Firms” might play in the insurance market in the coming years.

## Other EIOPA work

EIOPA has also set up an InsurTech Taskforce (ITF). One of the assignments of this taskforce will be *“the mapping of supervisory approaches to InsurTech as well as the current state of InsurTech facilitation with the aim to identify and report on best practices and identifying possible regulatory barriers to financial innovation.”*

There is a [stakeholder survey](#) from EIOPA to facilitate this work currently open. There are five main sections to the survey:

- General information
- Potential gaps and issues in the existing rules and possible regulatory responses
- Peer to peer (“P2P”) insurance
- Legal barriers to InsurTech
- Competent Authorities as innovation facilitators

The survey will close on 12 August 2018.

## How Milliman can help

Milliman can assist you with all aspects of your Big Data projects, and more broadly data science needs, including advice on:

- Best practice frameworks for Data Science processes
- Collection and processing of data
- Identifying applications
- Identifying suitable tools and techniques for particular circumstances
- Implementing solutions
- Understanding the implications of results
- Constraints and practical challenges

For further information please contact your usual Milliman consultant.



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