

Suptech Strategy

Interview with Ana Teresa Moutinho, Head of Supervisory Processes, with the Digital Finance magazine (Vangelis Vangelatos)

SPEECH

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What are the main challenges of the implementation of the new supervisory technologies?

The use of supervisory technology is already a reality in many national competent authorities and at EIOPA as well. Supervisors use technology (so called “SupTech”) to enhance internal administrative supervisory processes and to facilitate digital interaction with financial institutions but also for improving supervisory practices. Supervisory technology can also be helpful in data collection and data analysis, both quantitative and qualitative. This all helps to improve supervisory practices and promotes early identification and understanding of the risks.

In our view there are two main challenges in implementing supervisory technology: an organisational and a technological one. We can for example see that the authorities that have implemented organisational changes to prepare its staff for SupTech are more open and better adapted to SupTech implementation than the ones that haven’t adopted any changes. The changes include the promotion of an innovative and creative environment, and training programs in the area of new technologies.

From a technological perspective, the challenge is to decide in which technologies and supervisory areas to invest. When taking decisions the national competent authorities as well as EIOPA need to consider the complexity of the technology, the maturity level of the technology and of course the costs.

Authorities also need to change the approach to development. Here, I refer to a design thinking, where supervisors focus on creating products, services, experiences or systems that work for those who use them. New technologies will be used by supervisors, and that is why identifying their needs and taking into account how the new solutions are going to be used is very important.

As part of this mindset the authorities need to promote experience and ideas sharing. However, it is also important to acknowledge from the beginning that not all ideas will be successful. A step-by-step approach that allows proper testing of all ideas at an early stage is important to promote innovation and keep costs under control.

Together with the national competent authorities we have agreed to enhance cooperation and are developing common work in areas such as use of data to help mitigating some of the risks and challenges.

EIOPA's SupTech strategy states the inclusion of the human dimension in its background analysis. To what extent and how do you expect it to help in the formation of the SupTech strategy in the future?

Supervision should never lose the human dimension. Supervision of insurance undertakings is a complex task and the use of supervisory judgement is key. Different perspectives, dependencies and diversification effects, along with qualitative aspects, need to be considered in any analysis. Therefore it would not be prudent to base conclusions solely on automated processes without the proper consideration of expert judgement. This should be accompanied by flexibility in the supervisory review process to reflect the fact that the environment is constantly evolving.

EIOPA sees SupTech as a crucial tool at the service of supervisors. Supervisors needs, together with available technologies, will set the tone of SupTech strategies in the future.

But it is also important to work on the mindset of supervisors. Markets are becoming more and more digital and innovation is part of this process. SupTech is not only about adapting and changing supervisory processes to increase its efficiency but as well about supervising insurance undertakings with digital

business models.

The profiles of the supervisors needs to be broader and trainings in various areas must become a reality. The range of expertise needs to increase and include Information Communication Technology, data and digital areas experts working together with actuaries, economists and layers.

How will the SupTech implementation change the way of business and the insurance ecosystem in the future? How would you describe the days after the full SupTech implementation?

The intention of SupTech implementation should not be to change insurance business. Supervision needs to adapt to changes in business. The main objective of supervision is the protection of policyholders and beneficiaries. A similar level of protection should be provided to policyholders and beneficiaries across different Member States regardless of the location of the insurance or reinsurance undertakings' head office, regardless of the business model of the undertakings or the distribution models. Supervisors should promote the safety and soundness of insurance undertakings, focusing on the risks that they face or could face in the future.

New technologies are paving the way for new business models and supervisors need to continue to perform their tasks to ensure the objectives are fulfilled. In doing so, they can also use new technologies. These should lead to delivering innovative and efficient supervisory solutions that will support a more effective, flexible and responsive supervisory system.

However, in reality we can also see examples of technology developments that can support insurance business in such a way that will impact how supervision will be done in the future, if used extensively. For example, Blockchain enables immutable record-keeping and transaction processing through "Peer-to-Peer" exchange of digital data which is constantly updated and synchronised. The inherent trust and transparency could facilitate the establishment of collaborative efforts between insurance undertakings and the relevant supervisors. Supervisors may be granted access to data in the database in real time, accessing in this way an updated and unified view of core information relevant to the insurance market

supervision. In addition, blockchain could also enable more accurate and increased predictive analytics for the supervisors to undertake better risk-based supervision and more targeted audits and compliance checks. We have issued a discussion paper on blockchain and smart contracts in insurance and expect to develop further work in this area.

What impact will the SupTechs have in the operational costs of the underwriting companies? Will it cause viability issues for the smallest of them?

SupTech should lead to delivering innovative and efficient supervisory solutions that will support a more effective, flexible and responsive supervisory system. In developing SupTech solutions a costs benefit analysis for all stakeholder will need to be performed. This includes assessing the impact on EIOPA, national competent authorities and market players. Solutions causing viability issues for the smallest players should not be pursued without alternatives that duly take into account the principle of proportionality. The aim should also be to reduce compliance costs for the market.

This is also the reason why complexity and maturity of the new technology are factors to take into account together with the costs.

Which day-to-day tasks and problems will the SupTechs solve in the end user level?

EIOPA has a strategic priority to improve efficiency and effectiveness of the supervisory review processes by the continuous improvement of its business intelligence capability. We are for example enhancing the analytical framework, risk reports and the publication of statistics while taking advantage of new technological developments and the opportunities they present.

Some of the main uses of SupTech are for example automating and streamlining administrative and operational procedures (including interaction with the companies), digitising data, digitising working tools, improving data analytics and enhancing data visualisation.

Current discussion at European level include for example addressing problems of duplications and inconsistencies within the reporting frameworks of the financial

system. In EIOPA we believe that there is a need to continuously improve data collection. In the area of prudential reporting important steps have been made with the use of a centrally managed XBRL taxonomy for both insurance and pensions, data analysis for internal use and the development of reports for national competent authorities using the EIOPA database. From a conduct of business perspective, supporting market monitoring with the possibility of following non-traditional means to collect information on retail products is an area that we are exploring.

Improving data analytics in prudential and conduct of business supervision, both for insurance and pension funds is also already a reality. The data available is used to the utmost extent possible for the purposes of risk assessment, detailed analysis of specific topics, identification of early warning indicators, predictive analysis, etc.

In EIOPA's SupTech strategy, inconsistencies between European and national registries are noted. Is that a problem and if so how do you plan on addressing it?

EIOPA has identified some inconsistencies between European and national registries. This is happening because national registers of insurance undertakings are not synchronised and are also independent from our own, the EIOPA register. Therefore, the consistency among them relies on manual interventions, which introduces timing and human error risk. Several events can trigger an update of the register as, for example, some cross-border notifications, new authorisations, merges, acquisitions, withdrawing authorisations or portfolio transfers. The processes in place to submit this information to EIOPA or to perform all relevant cross-border notifications in time is not ideal which affects data quality.

EIOPA is following a due analysis process to identify the best solution to improve this situation. At the same time we are facilitating the exchange of cross-border notifications between national competent authorities and EIOPA. More concretely, we are developing an IT tool that will allow for better adaptation to the different IT systems of each national competent authority.

The final decision regarding EIOPA register is still to be taken but we can advance that some of the solutions analysed were significantly complex and would

probably not be reasonable in terms of cost/benefit for national supervisors, especially the smallest ones. Taking the final decision, EIOPA Board of Supervisors will consider the complexity, maturity and cost of the different options. We plan to improve the register during 2022.

How will be national competent authorities assisted with the implementation of SupTech strategy?

EIOPA will work from different angles. We will promote the exchange of knowledge and experience. For example, we will be organising forums where relevant projects being developed by the national competent authorities and that can be useful to solve specific supervisory issues will be identified and shared. We will also support the training of supervisors in different areas of new technologies.

EIOPA is making good use of IT technologies in areas such as data collection with the use of a centrally managed XBRL taxonomy for both insurance and pensions. The technology is also used for data analysis for internal use and the development of reports for national competent authorities using the EIOPA database. EIOPA has also developed a tool to support supervisors in the assessment of the adequacy of technical provisions for the motor liability line of business, using claims triangles and other information available. We are also in the implementation phase of the project “Business Intelligence 2.0” which will assess efficiencies and new data tools for different uses within EIOPA. This will include the considerations how to improve the value added that EIOPA delivers to national competent authorities in terms of data quality and data analysis.

In the long run are we on the course for an AI driven insurance sector?

The presence of data analytics in the sector is no surprise. Additionally, the COVID-19 pandemic has accelerated the adoption of artificial intelligence, including throughout the insurance value-chain. In 2019, EIOPA launched a thematic review on the use of Big Data Analytics specifically by insurance undertakings or intermediaries. We found that Big Data Analytics tools such as artificial intelligence or machine learning were already in use by 31% of the participating companies, and another 24% were at a proof of concept stage.

Artificial intelligence systems are used by insurance undertakings in all stages of the insurance value chain. They are increasingly used within insurance to process new and old datasets to underwrite risks and price insurance products or to launch targeted marketing campaigns and cross-sale insurance products. Artificial intelligence systems are also increasingly used to process claims more timely and fight against fraud more efficiently.

The benefits arising from artificial intelligence in terms of prediction, accuracy, automation, design of new products and services or cost reduction are remarkable so an additional increase in the use of artificial intelligence might be expected.

However, there are also growing concerns about the impact that the increasing adoption of artificial intelligence could have on the financial inclusion of groups of protected classes or vulnerable consumers or on our society as a whole. Some of these risks are not new, but their significance is amplified in the context of Big Data Analytics. This is particularly the case for ethical issues, in relation to the fairness of data use, as well as regarding the explainability and transparency to the so-called “black-box artificial intelligence systems”.

Therefore, addressing digital ethics for the insurance industry is a necessary task. The operation of the insurance market has important economic and welfare functions for the wider society and can have both positive and negative impact. In terms of social inclusion, life, health and non-life insurance lines all play an important role.

In order to support the preparation of the market for these developments, EIOPA convened a consultative Expert Group on Digital Ethics. This allowed a wide range of stakeholders to work together on identifying opportunities and risks associated with the growing use of artificial intelligence in insurance, including exploring possible limitations that might be needed. The Expert Group on Digital Ethics has developed six governance principles to promote an ethical and trustworthy artificial intelligence in the European insurance sector. The high-level principles which were published recently are accompanied by additional guidance for insurance undertakings on how to implement them in practice throughout the artificial intelligence system’s lifecycle.

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