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TRANSFORMATION OF THE INSURANCE MARKET UNDER THE INFLUENCE OF INSURTECH

The modern insurance market is undergoing changes that are no longer limited to the digitalisation of individual services. Technologies are gradually transforming the very logic of interaction between insurers and policyholders, as well as approaches to risk assessment, pricing, distribution of insurance products, and claims settlement. In this context, the development of InsurTech has become one of the most prominent areas of transformation in the insurance business.

In a broad sense, InsurTech encompasses the use of technological solutions to improve traditional insurance processes and to develop new insurance products and business models. The most widely used technologies include artificial intelligence and machine learning, Big Data, cloud technologies, telematics, the Internet of Things, blockchain, API solutions, mobile platforms, and automated claims processing systems. At the same time, the significance of InsurTech lies not so much in the use of a particular set of technologies as in its potential to reshape individual elements of the insurance value chain [3].

First and foremost, changes can be observed in the relationship between insurance companies and their customers. The traditional model, in which the conclusion of an insurance contract largely depended on direct interaction with an insurer or insurance intermediary, is gradually being complemented by digital channels. Customers are now able to compare insurance terms, select the required coverage, make payments, and obtain insurance policies remotely. Consequently, competition among insurers is increasingly shifting away from purely price-related factors towards the speed, accessibility, and convenience of insurance services.

At the same time, the digitalisation of insurance does not imply the complete abandonment of traditional distribution and service channels. The experience of the European insurance market demonstrates the

continuing importance of physical and hybrid channels of interaction, particularly in the life insurance segment. It is therefore more appropriate to speak not of replacing traditional insurance with technological platforms, but rather of the gradual emergence of a hybrid model in which digital and traditional channels complement each other. According to EIOPA research, the level of digitalisation among European insurers remains uneven, while digital channels have not yet displaced traditional forms of communication with policyholders [1].

InsurTech is bringing about even more significant changes in insurance risk assessment. Traditional underwriting is largely based on the statistical characteristics of particular groups of policyholders. Modern technologies, by contrast, make it possible to process much larger volumes of information and take individual risk parameters into account. Such data may come from telematics devices, mobile applications, sensors, information on user behaviour, and other digital sources.

In practice, this creates the conditions for a transition from relatively standardised insurance products to personalised insurance models. One of the most illustrative examples is usage-based insurance, where the cost of insurance depends on the actual intensity of use of the insured object or on the behavioural characteristics of the policyholder. This makes it possible to differentiate risks more accurately, while at the same time raising questions about the permissible limits of personal data use and the need to prevent discrimination against certain categories of customers.

Another important area is the application of artificial intelligence. Its potential in insurance extends far beyond chatbots and automated communication. Algorithms can be used in underwriting, claims analysis, fraud detection, customer segmentation, and risk forecasting. According to EIOPA, artificial intelligence was already being used by 50% of surveyed insurers in the non-life segment and by 24% of insurers in the life insurance segment. At the same time, a significant proportion of insurers planned to expand its use, indicating that AI is gradually moving from the category of experimental technologies to becoming an integral tool in insurers' day-to-day operations [1].

Particular attention should also be paid to the transformation of the claims settlement process. It is at this stage that policyholders effectively assess the actual quality of the insurance protection they have purchased. Automated notification of insured events, digital submission of documents, algorithmic verification of information, and remote loss assessment can significantly reduce the time between the occurrence of an insured event and the payment of insurance compensation. For

insurers, this also provides an opportunity to reduce the volume of routine operations and optimise operating costs.

InsurTech is also changing the nature of insurance products themselves. Alongside traditional insurance contracts, models such as on-demand insurance, parametric insurance, and embedded insurance are becoming increasingly widespread. Embedded insurance is particularly noteworthy, as insurance coverage is integrated directly into the process of purchasing another product or service. In this case, insurance is no longer perceived by consumers as a separate and complex financial transaction but becomes part of a broader digital ecosystem.

Thus, several interrelated areas of InsurTech's impact on the insurance market can be identified:

– digitalisation of distribution channels and communication with policyholders;
– automation of underwriting and claims settlement;
– use of large volumes of data for more accurate risk assessment and forecasting;
– personalisation of insurance premiums and coverage;
– emergence of new insurance products and distribution methods;
– changes in the structure of insurers' operating costs;
– development of partnerships between insurance companies, technology platforms, InsurTech start-ups, and other participants in digital ecosystems.

At the same time, technological transformation brings not only benefits but also new challenges. The more insurance processes depend on data and algorithms, the more important issues such as cyber risks, personal data protection, data quality, transparency of automated decision-making, and insurers' dependence on external technology providers become. Notably, almost 80% of insurers covered by the EIOPA study used BigTech companies for cloud data storage services [4]. Thus, digitalisation simultaneously enhances the efficiency of the insurance business while creating a new spectrum of operational risks.

Therefore, the main outcome of InsurTech development is not simply the transfer of traditional insurance products into the online environment. Rather, it involves a gradual transformation of the insurance market model: from standardised products to personalised insurance coverage; from periodic risk assessment to continuous risk monitoring; from lengthy claims settlement procedures to automated claims processing; and from stand-alone insurance services to their integration into digital ecosystems.

In conclusion, the further development of InsurTech should be regarded as one of the key drivers of the structural transformation of the insurance market. The competitiveness of insurers will increasingly be determined not only by the size of their insurance portfolios or the pricing parameters of their products, but also by their ability to work effectively with data, implement technological solutions, and at the same time ensure an appropriate level of protection of policyholders' rights. The balance between technological efficiency, financial reliability, and consumer trust is likely to determine the future direction and nature of the insurance market transformation.

References:

1. European Insurance and Occupational Pensions Authority. *Report on the digitalisation of the European insurance sector*. EIOPA, 2024. Available at: https://www.eiopa.europa.eu/publications/eiopas-report-digitalisation-european-insurance-sector_en?utm_source.

2. International Association of Insurance Supervisors. *Report on FinTech developments in the insurance sector*. IAIS, 2022. Available at: https://www.iais.org/uploads/2022/12/IAIS-Report-on-FinTech-developments-in-the-insurance-sector.pdf?utm_source.

3. OECD. *Technology and Innovation in the Insurance Sector*. OECD Publishing, Paris, 2017. Available at: https://www.oecd.org/en/publications/technology-and-innovation-in-the-insurance-sector_ddf9df41-en.html?utm_source.

4. International Association of Insurance Supervisors. *Digital Innovation*. IAIS. Available at: https://www.iais.org/activities-topics/digital-innovation/?utm_source.