

# Development of the life insurance ecosystem based on the creation of a single digital platform

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**Abstract.** Ensuring the development of life insurance as a significant component of the national economy and a source that ensures the formation of the country's long-term financial resources is traditionally of interest to researchers. A relatively new research vector may be the study of the issue of creating and developing a life insurance ecosystem, within which interactions between various financial institutions can be expanded. The article gives a brief description of the current state (development trends) of public and private life insurance in Russia and determines the need for their organization and development in the context of an ecosystem based on the creation of a single digital platform. The research purpose is to analyze the possibilities of creating a life insurance ecosystem in Russia and its functioning on the basis of a single digital platform. To achieve the research purpose, such methods as a systemic and logical analysis, a method of induction were used. The research results are as follows: risks that the life insurance ecosystem may face were identified and some ways to minimize them were proposed. In conclusion, the authors made a conclusion that the development of the life insurance ecosystem based on the creation of a single digital platform will expand the range of interactions between its participants and will make it possible to transform life insurance into a subject of national interest.

**Keywords:** Life insurance · Financial ecosystem · Digitalization of the economy · Interaction of economic entities · Digital platform.

## 1. Introduction

At the present stage of development, the topic of digital platforms and ecosystems is one of the most popular and attracting interest in almost all types of economic activity. Digitalization has also affected the insurance industry, including life insurance as well. Taking into account the implications of platform and ecosystem models for business formation and development, as well as the possible benefits and risks that they may present in the future, it becomes obvious that there is a desire to increase cooperation between the public and private sectors, including in life insurance.

A fairly wide range of scientific works is devoted to the development of financial ecosystems. First, the works on the formation and development of ecosystems in the financial sector (Kleiner et al., 2020; Maramygin et al., 2019; Frolova, 2020; Radkovskaya and Fomicheva, 2018). Secondly, the works devoted to the process of value creation (Kovalenko, 2017; Technology Vision for Insurance, 2017; Kapoor, 2018). Thirdly, studies that reveal the specifics of the organization of industry

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ecosystems, including insurance ones (Catlin et al., 2018; Kalaida et al., 2021; Gurdus, 2019; Rakowsky, 2021; Messineo, 2020).

In addition, it should be stated that, despite a significant amount of studies, there are virtually no works devoted to researching the specifics of creating life insurance ecosystems that promote interaction between public and private insurers, as well as identifying the opportunities and benefits of developing an insurance ecosystem based on the creation of a single digital platform.

In the authors' opinion, the study of theoretical and practical aspects of life insurance development inevitably leads to the problem of creating optimal conditions for the development of interactions between the state and private business in this direction. Therefore, issues related to the study and analysis of the conditions for the development of interactions between the state and private business, as well as the search for new approaches to their organization, appear to be extremely important and relevant tasks. As one of the approaches, it is proposed to consider the organization and development of the life insurance ecosystem based on the creation of a single "digital platform" (Melnikova et al., 2019).

## **2. Materials and methods**

To assess the current state of life insurance in Russia and determine the need for its transformation, the study will be carried out on the possibility of creating an ecosystem and determining the benefits that insurers receive by participating in them. As the main method in this part of the study, the methods of systemic and logical analysis based on the evolutionary methodology of scientific knowledge will be used. To justify the need to develop a life insurance ecosystem based on the creation of a single digital platform, it is planned to use an induction method, by means of which it is supposed to move from studying the specifics of creating a single digital platform and systematizing private factors (characterizing the state of the life insurance ecosystem) to generalized conclusions about the significance and need to manage the risks of the life insurance ecosystem organized on a digital platform.

## **3. Results and discussion**

The digitalization of the economy is gaining momentum, therefore, all business entities (including insurers) should go through the path of digital transformation, allowing them to reach a new level.

The basis of digital transformation is an ecosystem that combines information technologies and business functions of economic entities. In this regard, the creation of a life insurance ecosystem is a matter of digital transformation of its participants, the adaptability of their business processes and "financial sustainability" (Frolova, 2020).

As the analysis shows (Kleiner et al., 2020; Kalaida et al., 2021), the insurance industry, which until recently consisted exclusively of traditional insurance companies, has experienced a transformation, partly due to the conclusion of cooperation agreements with InsurTech, as well as "participation in banking ecosystems" (Kleiner et al., 2020; Radkovskaya and Fomicheva, 2018). As a result, doing business in the insurance industry under the ecosystem model has come to dominate. As rightly noted by Swiss Re experts: "When used wisely, digital ecosystems provide an opportunity for the industry to increase its relevance in a world of changing security needs" (Digital ecosystems ..., 2019).

Typically, insurers benefit from ecosystems through (Messineo, 2020):

- increased flexibility to provide quality customer service;
- access to new or enhanced features;
- increase in operational efficiency;
- application of partner innovations to accelerate product development based on individual customer characteristics and available analytics to better assess risk;
- improving scalability by digitizing existing business models;
- reducing operating costs and increasing business profitability.

At the present stage, many of the world's largest insurance companies (Allianz, AXA, Zurich, Aviva, Nationwide, Ping An, Nippon Life Insurance, etc.) are ecosystem players. As the survey showed, "76% of insurers agree that competitive advantage will be determined not only by their organization, but also by the financial strength of their chosen partners and ecosystems" (Digital ecosystems ..., 2019).

In the authors' opinion, a life insurance ecosystem is a complex dynamic self-organizing and self-regulating system, which is an integral part of the national social protection ecosystem, combining many interconnected services on a single IT platform in a single interface that allows its participants to create higher quality personalized life insurance products based on customer data exchange and offer them to the public through integrated interaction with users. The main task of the life insurance ecosystem is to provide a customer with online services based on his desire and willingness to form insurance coverage for himself and his relatives, taking into account individual characteristics (well-being, health status, marital status, obligations, etc.).

Factors affecting the creation and development of the life insurance ecosystem in Russia:

- 1) development of information technologies (IT) and readiness to use IT solutions by insurers in practice;
- 2) a sufficiently large base of customers who trust insurers and may be interested in the possibility of obtaining various services and services from their partners;
- 3) insurers' readiness to move away from traditional methods of doing business and the desire to expand areas for cooperation with partners both in terms of maintaining the sustainability of the business system and investments;
- 4) formation of alliances between institutions, including acting as competitors in the recent past;
- 5) development of new digital technologies based on the use of information transmission and processing means (Big Data, robotics, telematics, blockchain, cloud technologies, biometrics, artificial intelligence, etc.).
- 6) increased competition is no longer between organizations, and even not between conglomerates, but between ecosystems.

The development of the life insurance ecosystem includes the following areas:

- partnerships that could help insurers reach insurance consumers outside existing distribution channels;
- partnerships that complement existing products and stimulate interaction with customers;
- partnerships that provide additional services or opportunities.

The development of the life insurance ecosystem will allow insurers (Pension Fund of the Russian Federation, Non-Governmental Pension Fund and life insurers) to quickly cover a large number of insurers' needs with lower financial costs and ultimately move from risk aggregation and, accordingly, the "reimburse and pay" policy to risk prevention and the "protect and prevent" policy (Gurdus, 2019).

Thus, "taking an ecosystem perspective – reevaluating the traditional business model and considering partnerships with players both inside and outside the industry – can revitalize insurers' digital strategies" (Catlin et al., 2018). Accordingly, the development and launch of a single digital platform will help accelerate the adaptation of the newly created ecosystem.

The development of the life insurance ecosystem based on a single digital platform will allow its participants to:

- form informal autonomous networks among themselves, increasing the overall interactivity on the platform (Messineo, 2020);
- simplify and standardize the interaction between divisions, departments and employees;

- create and effectively use expert decision support systems;
- form asset management systems;
- manage business processes in real time;
- set up end-to-end analytics, make decisions and manage the product value based on data;
- improve customer service;
- increase employee productivity, standardize educational practices;
- ensure data security and reduce risks (Gribov, 2022).

Thus, a single digital platform will help solve many problematic issues that hinder the digital transformation of economic entities and their adaptation to changing operating conditions.

#### 4. Conclusion

The introduction of a proposal to create a life insurance ecosystem may provoke the emergence of the following risks:

- information security risks caused by the digitalization of operational processes and the development of electronic services, as well as an increase in the number of cyber-attacks, which, in turn, can lead to the occurrence of the risk of leakage and unauthorized use of client data;
- risks of forced support by insurers of other participants in the ecosystem in case the latter encounter difficulties in order to avoid risks for their business;
- risks of reducing the efficiency of the ecosystem in case of an erroneous approach to the choice of partners or investments in client scenarios, or investments in process technologies;
- risk of decrease in solvency of insurers, the possibility of which is due to the deterioration in the quality of assets formed in life insurance, and a decrease in their investment potential associated with the process of increasing immobilized assets directed to maintain competitiveness by insurers and ensure compliance with the financial stability of their business with regulatory indicators;
- risks of an increase in the regulatory burden on insurers participating in the processes of systemic convergence, due to the desire of the state to minimize the occurrence of systemic risk;
- systemic risk, which may be caused by a deterioration in the position of insurers operating in life insurance, due to the need to provide financial assistance to partners in case the latter encounter difficulties in order to avoid risks for their business, the implementation of which may require expanded support from the state.

To reduce these risks, different management approaches can be used: from a prohibitive approach (refusal to continue the implementation of the transition strategy to a new insurance model, for example, systemic convergence) to more flexible ones, which allow unlocking the potential of the model and obtaining a synergistic effect while organizing adequate coverage of possible negative consequences, which include:

- creation of reserves and establishment of a differentiated multiplying coefficient for their formation, depending on the pace of development and the importance of new insurance models (for example, a system-convergent model) in the country's economy;
- organization of a monitoring system with tracking risk assessment and development of measures aimed at preventing possible situations;
- regulation of integration processes by applying various methods of shaping the model and monitoring the criteria for evaluating the effectiveness of its functioning.

The proposed approach will allow insurers to develop their relationships both within the system and with the environment external to life insurance, which will contribute to technological progress

and service improvement (in qualitative and quantitative terms) and simultaneously limit the risks for their clients (insured persons, insured persons, beneficiaries) since, in case of excess concentration, investments in life insurance policies (including pension insurance) will be backed by capital generated in the system (i.e. in public and private life insurance in aggregate) and not by customer funds.

Thus, the introduction of a unified digital life insurance platform, which is part of the social security digital platform, will increase the awareness of recipients of insurance services and focus on the quality of services provided, which will make it possible to objectively assess the satisfaction of consumers and other participants in insurance relations and outline ways for their development. Only with the continuous improvement in the quality and transparency of services, a unified digital life insurance platform has a chance for successful and efficient functioning.

The digital life insurance platform will also expand the involvement of the Russian population as a whole in the issues of financial and social welfare and, as a result, “transform life insurance” (Bhatia et al., 2021) into a subject of national interest.

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