Digitalization of the Russian Insurance Market: Problems and Prospects

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Abstract. The introduction of various digital solutions, such as artificial intelligence, big data, not to mention comprehensive computerization and Internetization, has become the main trend in the development of the economy. This article focuses on the digital transformation of the insurance industry in Russia, the opportunities that may arise through digitalization, and the risks associated with them. The article also discusses technologies that can provide digital progress in insurance.

1. Introduction

Everyone knows firsthand that the world is on the verge of great changes associated with the onset of the fourth industrial revolution. Already now these changes are felt. We use gadgets and technology, buying vacation tickets or paying utility bills, choosing clothes, and getting an education. The "figure" has become an integral part of the daily life of most people.

Currently, the main vector of development of many sectors of the economy is digitalization. Insurance is no exception. In this article we will consider the problems and prospects of digitalization of the Russian insurance market.

Insurance is one of the important elements of a market relations system. Its role is manifested in ensuring social and economic stability in society through the full and timely compensation of damage and attracting temporarily available funds of the insurance fund to the investment activities of insurance organizations.

Digitalization for the insurance market is an opportunity for a qualitative breakthrough. Digital transformation would reduce costs, make insurance more flexible and adapt to individual needs, more convenient and attractive for consumers of services, which, ultimately, would have a positive impact on the development of the insurance market.

But while the Russian insurance market is not moving intensively in the direction of the new economy.

So, for example, in the period from 2016 to 2019, the proportion of Russians with experience in completing an online insurance policy almost did not change. For comparison, also in the financial sector, but in the market of banking services, the dynamics of digitalization of consumer behavior is more pronounced. For example, over a similar period (2015-2019), the share of Russians who prefer a non-cash payment method tripled—from 16% to 46%.

Considering the size of insurance premiums in electronic insurance, one can note an increase in 2018 compared to 2017. The most dynamically developing in this direction were voluntary medical insurance, property insurance for individuals and motor third party liability insurance. But other industries have proved to be quite successful (Figure 1).
Among the insurance companies, the following leaders can be distinguished by the size of contributions in electronic insurance (excluding OSAGO) in 2018: Ingosstrakh IJSC (4389384 thousand rubles), Alfastrakhovanie insurance group (3339422 thousand rubles), Renaissance Insurance group (919771 thousand rubles) and others (Figure 2).

You can also notice that insurance organizations introduce their activities in the digital segment in an unequal measure, because the amount of electronic insurance contributions at Ingosstrakh IJSC, which heads this rating, is more than 4 times higher than the same indicator for a company that is only in third position.

Figure 1. The Growth Rate of Contributions on Electronic Insurance in the Context of Individual Activities, 2018/2017.

Figure 2. Insurance Companies—Leaders in Terms of Electronic Insurance Contributions (Excluding CTP) in 2018 (Thousand Rubles).
As a result of the digitalization of the insurance market, Russians have new opportunities for obtaining insurance products. Today 64% of Russians know that an insurance policy can be issued via the Internet, and every tenth respondent (11%) has already used this service. Most often, young people aged 25 to 34 years old (16%) and high-income Russians (17%) issued a policy remotely. However, more than a third of Russians surveyed by the NAFI center (36%) are not aware of the possibility of acquiring an online policy.

Let us turn to other solutions that can accelerate the development of the Russian insurance market. There are three main blocks of technological innovations in insurance that can dramatically change this market:

1) remote communication with customers, insured persons, as well as insurance objects;
2) “big data”, business analytics and “smart” solutions built on this basis;
3) digitalization of all business processes and the insurance stages themselves (for example, blockchain technology).

As part of the first block, telematics in the motor hull gained the greatest popularity. With the help of special equipment installed in the client’s car, the insurance company can monitor the driving style and thus determine the level of risk. Accurate drivers can receive substantial discounts on motor hulls. Now the spread of telematics in car insurance is only gaining momentum, both in Russia and in the world.

Telematics will be applied in all types of insurance. Contrary to popular beliefs, the penetration of telematics products in Russia is not so much less than most developed markets.

Telematics technologies are gradually spreading from motor insurance to other types, for example, property insurance (smart home), cargo insurance and VHI. Telematics can protect the “smart” house from robbery and various force majeure situations (for example, from a fire). In transportation using telematics, track the path of the cargo. Legislative changes also contribute to the spread of telematics in VMI - in particular, the adoption of the law on telemedicine. Health telematics is an ecosystem of wearable devices, various trackers that allow you to control health indicators and lifestyle: pulse, number of steps, physical activity, blood sugar and much more. Insurance products built on the basis of health monitoring will not only be more beneficial for clients and insurers, but, on the whole, will allow people to carefully monitor their health and lead a healthy lifestyle.

The second direction is “big data”, business analytics and “smart” solutions built on this basis. Big Data and business intelligence tools provide an opportunity to analyze in real time many different factors that affect risks and loss-making. The use of these technologies reduces the cost and optimizes the daily business processes of insurers. Companies that automate risk analytics receive significantly greater returns from all sources of information and identify risks at earlier stages.

Consumers will also noticeably benefit from this: focusing on hundreds of behavioral factors of specific clients, insurers can calculate individual rates for almost everyone. As a result, a client with a positive insurance history and low risks will receive a much lower rate.

In addition, thanks to the dissemination of Big Data, on-demand insurance is actively developing — programs that allow you to "enable" insurance as an application on your smartphone, when you need it, for example, a car insurance while traveling, home insurance during departure.

And, finally, the third area of innovation is the digitalization of all business processes and the insurance stages themselves, from purchase to settlement of the insured event.

Here, the blockchain has proven its worth: solutions based on it allow you to check the personal data of the insured and verify the parameters of actions on insurance objects - both during the execution of policies and when working on insured events, that is, they work to reduce losses from fraud. Blockchain-based mutual insurance societies are increasingly appearing in the world, this is a new round of interest in mutual insurance systems—an analogue of P2P lending, but for risk management and insurance event payments.

Digitalization for the insurance market entails not only undeniable competitive advantages, but also the negative consequences and risks that must be taken into consideration.
All the possible negative consequences of the impact of digitalization on insurance can be conditionally divided into 2 groups: those that are common to the entire Russian society and its economy, and those that are caused by the specifics of insurance as a type of social activity.

In general, for the insurance business and the state these are the risks associated with:
- the common challenges and threats of digitalization for the insurance business and the state in the insurance industry;
- the dependence of the development of the Russian insurance market on the policy of foreign states in relation to Russian insurance;
- Inadequate regulation of insurance activities in the context of digitalization;
- insufficient training of personnel both in the field of information security of the insurance segment of the economy, and the personnel of the insurance market, perceiving, understanding and using new information technologies in insurance due to digitalization, etc.

For the insurance business, these are the risks associated with:
- external information and technical impact on the national insurance information infrastructure;
- the growth of computer crime in insurance, including international insurance;
- lagging behind leading foreign states in the development of competitive information technologies used in insurance;
- insufficient effectiveness of scientific research conducted in the insurance industry and related to the creation of new insurance products and information technologies that are promising for the insurance market;
- low level of implementation in insurance of domestic developments, including those due to digitalization.

For an individual, these are the risks associated with:
- threats to digitalization of insurance activity for an individual participating in insurance, including those related to insecurity and/or violation of human rights;
- violations of the safety of digital data of the user of insurance services;
- distrust of citizens in the digital environment of the insurance market, etc.

The emergence of specific risks of digitalization of the insurance segment of the financial market is facilitated, firstly, by its features that create opportunities for a wider and deeper penetration of digitalization in the insurance market, and, secondly, the very penetration of digitalization in the insurance sector.

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2. Conclusions

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