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THE IMPACT OF DIGITALISATION ON THE DEVELOPMENT OF INSURANCE SALES CHANNELS

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ABSTRACT

Insurance distribution channels are key factors in the value chain of insurance companies. With the development of digital technology, distribution channels have taken on different forms, so new ways of distribution appear in insurance sales, such as mobile applications, websites of insurance companies, aggregators, etc. With the development of technology, new methods and new techniques appear for collecting and processing data and for detecting fraud. Digitalisation has direct impact on the operations of insurance companies. This paper work also analyzes the online insurance sales in Serbia, as well as the perspective of implementation of modern insurance distribution channels in the future. The analysis covers the period 2019-2023. The research showed that online insurance sales in Serbia are growing, but its share in total insurance sales is still negligible.

KEYWORDS

digitalisation, insurance, sale channels, Serbia

INTRODUCTION

Today, the Internet has become an indispensable tool in the business of companies in the insurance sector. With its ability to connect businesses with consumers, the Internet has revolutionized insurance sales. The Internet has changed the way policies are marketed, sold and serviced. In the past, insurance transactions were often time-consuming and involved a lot of paperwork. However, the Internet offers convenience and efficiency. Now potential policyholders can research, compare and buy insurance policies online, right from their homes or offices. This digital transformation has streamlined the process, making it faster and more friendly user, ultimately leading to greater customer satisfaction.

Modern trends in business have imposed on insurance companies the need for accelerated digitalisation, with the aim of increasing the number of clients, sales volume, market share, as well as improving the company's financial performance. On the other hand, digitalisation is the source of new types of risks in the insurance sector.

In some countries, payment of insurance premiums, delivery of insurance policy and payment of claims are not allowed to be done completely online, in accordance with legal regulations and technical limitations. However,

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in most countries in order to support online payment of insurance premiums and online delivery of insurance policies, legal regulations are constantly being modified (Hiwarkar, Khot, 2013).

According to Eling and Lehmann (2018) digital transformation directly affects insurance companies, as it enables the automation of business processes and decision making. The authors point out that existing insurance products are changing in insurance, but new products are also being created (e.g. cyber risk insurance). Finally, the way insurance companies communicate with their customers is also fundamentally changing, which is why the insurance sales sector is particularly affected.

The covid-19 pandemic additionally influenced insurance companies to switch their business from traditional to online business. Kim (2020) emphasizes that consumer adaptation to online commerce will not end or decrease after the covid-19 pandemic has passed. Online sales of insurance policies and claims reporting enabled policyholders easier and faster access to insurance companies. On the other hand, the advantage of selling insurance online is the small number of mistakes by insurance employees, because the insured person is responsible for the entered data. It follows that the advantage of online sales is greater precision in the data and a greater degree of their control. The covid-19 pandemic affected business changes, but it also caused changes in consumer behavior. It is certain that the changes are of a long-term nature, that they continued even after the end of the pandemic. Kim (2020) points out that the motives for live shopping are immediacy and social interaction, and the motives for online sales are economic and it offers more flexibility in terms of time, location and access to a variety of products.

DIGITALISATION OF THE INSURANCE SECTOR

The application of digital technology in almost every segment of business, known as digitalisation, has reshaped the world economy in recent decades. Digitalisation is the process of converting information into a digital format, which enables computing, which in turn enables the digital transformation of economic activities and thus enables:

- 1) to extract and analyze much more data,
- 2) greater personalization and customization,
- 3) new types of controlled experimentation and optimization; and 4) new forms of contracts (Swiss Re, 2023).

There are different definitions of digital transformation and digitalisation in the literature (Ingleton et al., 2011, Hiendlmeier, Herting, 2015, Eling, Lehmann, 2018). Here we highlight the definition of Eling and Lehman (2018), who understand digital transformation as the integration of the analog and digital worlds using new technologies, which improve interaction with customers, business processes and data availability. Therefore, the authors emphasize exclusively the economic effects of digitalisation. Digitalisation contributes to the development of new products, services, business models and stages in the value chain of insurance companies.

When we talk about relevant digital technologies, digital applications for selling insurance have been identified based on them. Analyses by Eckert & Osterrieder (2020) and Eling & Lehmann (2018) show that strong drivers of digitalisation are big data, artificial intelligence, cloud computing and new communication channels.

In 2023, EIOPA (European Insurance and Occupational Pensions Authority) conducted an extensive survey of the European insurance market with the aim of better understanding the dynamics,



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opportunities and risks associated with ongoing digitalisation projects in the insurance sector. The EIOPA report (2024) listed the following key research findings:

- The digitalisation of the insurance sector in Europe is diverse and, in most cases, still under development; as the practical application in the insurance market is different, and the level of digitisation varies significantly from one insurance company to another;
- "Pure" digital distribution channels still play a secondary role among all distribution channels for insurance products, especially for life insurance; Customers still buy insurance products through physical channels, although online tools can be used for comparison and information purposes; Customers' shopping behaviors primarily depends on their level of digital literacy;
- Telephone, e-mail and face-to-face are the most popular communication channels that customers use to interact with insurance companies today. Chatbots are used; their use is expected to increase significantly in the near future, which is related to the emergence of solutions based on artificial intelligence (AI). A small number of clients have implemented applications for mobile phones;
- Most insurance companies are active in social media, mainly to interact with clients and launch marketing and financial education campaigns, and in some cases they also cooperate with social media "influencers";
- There is a high concentration in the provision of relevant IT services such as cloud computing; almost 80% of respondents store data on the BigTech cloud;
- AI is used by 50% of respondents in non-life insurance and 24% in life insurance, and an additional 30% and 39% of respondents expect to use AI in the next 3 years, in non-life and life insurance;
- Most of the AI use cases are developed in-house, with simpler and more understandable AI solutions currently being used the most. From a company governance and risk management perspective, AI is most often used with human supervision, and the company's Board of Directors/Executive Board is most often responsible for approving the use of AI;
- Other technologies, such as Blockchain (including crypto assets) and Internet of Things (IoT) are currently used by small number of insurance companies;
- Most insurance companies report growth in the cyber insurance market over the past two years, although cyber insurance products still include significant coverage exclusions. Cyber insurance products are mainly marketed to corporate clients, including small and medium enterprises (SMEs);
- Acquiring adequate skills is considered the main driver of digitalisation, but also a barrier to digital transformation. Insurance companies see cyber risks as the main risk arising from digitalisation.

Since the 2010s, the literature often provides practically oriented researches of specific problems in the organization of business processes starting from general ones, such as Internet technology (websites, mobile applications, other programs for online sales), to applied aspects of using artificial intelligence (chatbots, generation of proposals based on analysis of requirements), program for recognition and protection of documents.(Bryzgalov, Tsyganov, 2022)

The use of the Internet in the distribution of insurance services has led to the emergence of insurance companies that base their business exclusively on the Internet, but their offer of insurance services is



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limited. The insurance protection services (e.g. auto liability insurance, travel health insurance, accident insurance or household insurance) that do not require detailed risk assessments or customized service can be sold via the Internet (Piljan, Cogoljević, Piljan, 2023).

One of the results of the research conducted by Eckert, Eckert and Zitzmann (2021), after the first wave of the covid-19 crisis in Germany, shows that many traditional insurance sales channels are still not used as well as messenger services or video chat to interact with customers, although are these tools the most convenient alternatives for providing advice without personal contact. However, participants see greater benefit in video chats with more advanced features, such as screen or whiteboard sharing. Thus, video chat alone is not considered effective enough to replace face-to-face meetings, while video chats with advanced features hold more promise. The reason for such results could be the less open attitude of insurance intermediaries regarding digital applications. However, another reason may be that customers themselves still have reservations about digital applications. Easy-to-use and secure tools could solve this problem and improve the sales process when face-to-face meetings are not possible. Overall, the research results reveal that digital transformation in traditional insurance sales has not yet progressed (Eckert, Eckert, Zitzmann, 2021).

Digitalisation brings multiple opportunities for customers and insurance companies. From the perspective of insurance companies, faster and automated processes, lower operational costs and more convenient products and services for customers (e.g., products available on a 24-hour basis and accessible from any location) are presented as the greatest benefits (EIOPA, 2024).

ANALYSIS OF ONLINE INSURANCE SALES IN SERBIA

The insurance market in Serbia is still underdeveloped. Data such as low premium per inhabitant, low share of premiums in the gross domestic product, low share of life insurance in the structure of the total premium prove this. (Aničić, Anufrijević, 2022)

Today, classic insurance contracts are still dominant in Serbia, but it is inevitable that the sale of insurance online will become more and more common. This type of contracting, as well as activities aimed at the digitisation of business, was accelerated by the COVID-19 pandemic, primarily due to the growing need to find additional ways to sell insurance, but also to perform all other activities related to insurance (resolving compensation claims, customer service for clients, etc.).

According to data from the National Bank of Serbia (NBS) on the total insurance premium by sales channels and by insurance companies, insurance services are sold on the Serbian market through the internal sales network of companies: company employees, as well as the Internet and other means of telecommunications, then intermediaries and insurance agents, legal entities that were established according to another law and have the consent of the National Bank of Serbia for the sale of insurance services (banks, financial leasing and public postal operators), technical inspections, persons that perform mediation and representation activities based on Article 113 of the Law about insurance, where insurance is a supplement to a specific product (travel agencies, mobile phone stores, technology stores, etc.).

NBS publishes annual reports on the operations of insurance companies. According to NBS reports, insurance services are sold mainly through the internal sales channel, i.e. employees of insurance companies. During the observed period (2019-2023), the share of the premium in the total market premium realized in this way was more than 60%, followed by insurance intermediaries with 12% (on average), technical inspections with around 10%, companies for representation in insurance 6%, banks with around 5% and other distribution channels individually under 5% share (NBS).



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The data on the premium generated by the sale of insurance services via the Internet and other means of telecommunications (online sale) are devastating. The share of this premium in the total premium (life and non-life insurance) in the period from 2019 to 2023 recorded a growth in a certain percentage, whereby in 2019 it had a share in the premium of 0.1%, while in 2020 its share was 0.06%, and in 2021 it was 0.15%, in 2022 it was 0.28% and in 2023 it was 0.36% in the total market insurance premium (Table 1.)

Table 1. Share of the insurance premium realized through online sales in the total insurance premium

	2019	2020	2021	2022	2023
Total insurance premium (in 000 dinars)	107.449.870	109.916.743	119.408.670	133.925.041	155.254.730
Online sale (in 000 dinars)	110.659	71.255	181.967	368.942	552.192
Share (%)	0,1	0,06	0,15	0,28	0,36

Source: Author's preparation based on the annual report of the NBS on the operations of the insurance companies in 2019, 2020, 2021, 2022, 2023.

Analyzing the year 2023, as the year with the best results, insurance companies, through the Internet as one of the sales channels, sold only non-life insurance, whereby the dominant share in the insurance premium realized through online sales was travel assistance insurance (more than 76%). motor vehicle insurance (more than 17%), financial loss insurance (2.78%), voluntary health insurance (1.4%), other property insurance (0.81%), property insurance against fire and other hazards (0.66%) and a small share of insurance against the consequences of an accident, legal protection costs and general liability (Table 2.).

Table 2. The structure of insurance premium realized through online sales in 2023.

Type of insurance	Insurance premium (in 000 dinars)	Share (%)
Travel assistance insurance	423.552	76,7
Motor vehicle insurance	97.323	17,62
Financial loss insurance	15.344	2,78
Voluntary health insurance	7.719	1,4
Other property insurances	4.478	0,81
Property insurance against fire and other hazards	3.624	0,66
Accident insurance	105	0,02
Legal protection costs insurance	27	0,005
General liability insurance	20	0,004
TOTAL	552.192	100,00

Source: Author's preparation based on the annual report of the NBS on the operations of the insurance companies in 2023.

CONCLUSION

The revenue generated by digital distribution channels is important indicator for assessing the level of digitalisation of the insurance sector. In insurance, digital sales are distributed through the insurance company website, comparison websites, social media, mobile applications, or websites from other third parties (e.g., airplane companies selling travel insurance on its website).



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So far, the results of online sales of insurance in Serbia are modest, but they are constantly growing. With the improvement of the overall economic situation in the country, an increased interest in this distribution channel can be expected on the part of both clients and insurers.

Research has shown that the choice of insurance sales channel depends on the type of product being purchased and its features. Traditional sales channels are more suitable for life insurance. On the other hand, modern sales channels are more suitable for travel insurance, car insurance, liability insurance and some simple life insurance products.

Insurance companies should direct their activities towards online sales of insurance for the following reasons: a) the increase in existing services can be achieved by adding value through online sales, thereby increasing user satisfaction; b) reduction of costs, because digitalisation of the sales process enables fast and efficient sales and obtaining an insurance policy online and paying for services by payment card; c) increasing the quality of services and client satisfaction; d) increasing the rating of the insurance company.

REFERENCES

- Aničić, A., Anufrijev, A. (2022). Optimism in the development of the insurance sector in Serbia. *Revizor*, 25(99), 81-88.
- Bryzgalov, D.V., Tsyganov, A.A. (2022). Consumer Limitations on the Digitalization of the Insurance Market and Ways to Overcome Them. *Studies on Russian Economic Development*. 33, 539–546.
- Eckert, C., Eckert, J., Zitzmann, A. (2021). The status quo of digital transformation in insurance sales: an empirical analysis of the German insurance industry. *ZversWiss*, 110, 133–155.
- Eckert, C., Osterrieder, K. (2020). How digitalization affects insurance companies: overview and use cases of digital technologies. *Zeitschrift für die gesamte Versicherungswissenschaft*, 109(5), 333-360.
- EIOPA. (2024). Report on digitalisation of the European insurance sector. EIOPA-BoS-24/139, 30 april 2024. Frankfurt. Available on: https://www.eiopa.europa.eu/document/download/6ca9e171-42b9-44d7-a2e6-beaf0134ecb8_en?filename=Report%20on%20the%20digitalisation%20of%20the%20European%20insurance%20sector.pdf
- Eling, M., Lehmann, M. (2018). The impact of digitalization on the insurance value chain and the insurability of risks. *The Geneva papers on risk and insurance-issues and practice*, 43, 359-396.
- Hiendlmeier, S., Hertting, M. (2015). The impacts of digitization on the management of insurance companies: steering business in a digital world. Available on: https://www.horvath-partners.com/fileadmin/horvath-partners.com/assets/05_Media_Center/PDFs/englisch/WP_Insurance_Digital_web_g.pdf
- Hiwarkar, T., Khot, P. G. (2013). E-Insurance: Analysis of the Collision and Allegation of E-Commerce on the Insurance and Banking. *Journal of Business Management & Social Sciences Research*, 2(6), 457-470.
- Ingleton, R., Ozler, Y., Thomas, P. (2011). The digitization of everything: how organizations must adapt to changing consumer behavior. Available on: http://www.ey.com/Publication/vwLUAssets/The_digitisation_of_everything_How_organisations_must_adapt_to_changing_consumer_behaviour/%24file/EY_Digitisation_of_everything.pdf



Conference Proceedings

Kim, R.Y. (2020). The Impact of COVID-19 on Consumers: Preparing for Digital Sales. IEEE Engineering Management Review, 48(39), 212-218. doi: 10.1109/EMR.2020.2990115

NBS (2024). Annual report on the total insurance premium by the sales channels for Serbia in 2023. Available on: https://www.nbs.rs/export/sites/NBS_site/documents/osiguranje/godisnji/god_T15_2023.pdf

NBS (2023). Annual report on the total insurance premium by the sales channels for Serbia in 2022. Available on: https://www.nbs.rs/export/sites/NBS_site/documents/osiguranje/godisnji/god_T15_2022.pdf

NBS (2022). Annual report on the total insurance premium by the sales channels for Serbia in 2021. Available on: https://www.nbs.rs/export/sites/NBS_site/documents/osiguranje/godisnji/god_T15_2021.pdf

NBS (2021). Annual report on the total insurance premium by the sales channels for Serbia in 2020. Available on: https://www.nbs.rs/export/sites/NBS_site/documents/osiguranje/godisnji/god_T15_2020.pdf

NBS (2020). Annual report on the total insurance premium by the sales channels in Serbia in 2019. Available on: https://www.nbs.rs/export/sites/NBS_site/documents/osiguranje/godisnji/god_T15_2019.pdf

Piljan, I., Cogoljević, D., Piljan. T. (2023). Osiguranje. Visoka škola za poslovnu ekonomiju i preduzetništvo, Beograd.

Swiss Re Institute. (2023). The economics of digitalisation in insurance: new risks, new solutions, new efficiencies. Sigma No 5/2023. Zurich. Available on: <https://www.swissre.com/dam/jcr:dfcf4d4a-d6f6-424c-949f-794066470c8f/2023-09-sri-sigma-5-the-economics-of-digitalisation-2023.pdf>

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