PLATFORM MODELS AS DIGITAL TRANSFORMATION SOLUTION OF THE INSURANCE SECTOR: AN EMPIRICAL STUDY IN NORTHERN CROATIA[1]

MODEL PLATFORMI KAO RJEŠENJE ZA DIGITALNU TRANSFORMACIJU SEKTORA OSIGURANJA: EMPIRIJSKO ISTRAŽIVANJE U SJEVERNOJ HRVATSKOJ

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SUMMARY

Today's dynamic business environment requires digital transformation as an inevitable factor shaping the development of various industries and sectors, including the financial and insurance sectors. Although the financial sector has adapted relatively quickly to the demands of today's digital environment, the insurance sector faces challenges in its transition towards digital transformation. This research explores this very topic, analyzes key concepts of digital transformation and conducts research on the possibilities of applying platform models in the Republic of Croatia and the opinion of respondents from Northern Croatia. One of the goals of this paper is to provide a more detailed insight into the possibilities of digital transformation of the insurance sector, as well as identify the steps that are necessary to achieve technological and business innovations in this sector. Through empirical research conducted on 235 respondents, the potential for the digital transformation of the insurance sector through the model of digital platforms is analyzed by examining respondents' opinions and attitudes on whether the platform model could be a solution for the digital transformation of the insurance sector. The respondents' inclination towards using digital platforms for purchasing insurance products or contracting insurance services in Northern Croatia is also examined. A descriptive study was conducted using an online survey questionnaire.

Findings show that respondents from Northern Croatia are inclined towards the platform model as an optimal solution for the digital transformation of the insurance sector, indicating a growing awareness of the benefits that digital platforms bring, as well as the need for their

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*implementation to ensure the insurance sector successfully adapts to contemporary techno-
logical trends and market demands.*

Keywords: digitalization, digital platforms, digital transformation, insurance, InsurTech
Ključne riječi: digitalizacija, digitalne platforme, digitalna transformacija, osiguranje, InsurTech

1. INTRODUCTION

While other industries very quickly adopt new technologies and adapt to the needs of the market,
the insurance sector is clearly lagging behind. Traditional models of the sector are still complex, and
organizations are characterized by too many levels of management, complex procedures and slow busi-
ness processes that often require unnecessary paperwork. Due to firm rules and traditions, organizations
within the sector are resistant to changes and innovations, which in turn results in less efficient and less
flexible products and services. Today's consumers, especially younger generations, expect the same
level of practicality and availability as in other spheres of life, so for insurers, creating digitally oriented
services is not only a matter of attracting new clients but also of retaining existing ones. Organizations
that can meet the digital needs of consumers will have a competitive advantage, so it can be concluded
that digital transformation is necessary for the insurance sector to adapt to changes in the market and
customer expectations. Digitization can enable insurers to optimize their processes, speed up claim
processing, personalize services and improve communication with customers, but the implementation
of digital platforms can be a key solution for the digital transformation of this sector.

The digital platform model is already successfully applied in e-commerce, entertainment, media and
travel sectors, and is a prime example of how digital platforms can improve business, enhance user
experience and create new business opportunities. There are also successful examples of the application
of digital platforms in the financial and insurance sectors, which shows that digital transformation is
feasible and very useful in this area. Overall, the digital transformation of the insurance sector is not
only a trend but also a necessary step to ensure competitiveness and meet the expectations of modern
consumers. The implementation of the platform model can be a key factor in achieving these goals,
therefore the purpose of this thesis is to prove that the platform model is the solution for the digital
transformation of the insurance sector.

Therefore, the subject of this paper is the need for the digital transformation of traditional models in
the insurance sector, with an emphasis on the application of the digital platform model and all the
advantages it offers. The economy of platforms is analyzed and what are the most important digital
platforms, the concept of InsurTech and the ways of applying new technologies are explored in more
detail, while the primary research aims to reveal the knowledge of the concepts of digitalization and
digital transformation. The primary research also investigates how many respondents from Northern
Croatia know the aforementioned concepts, how many of them understand that the products and/or
services they use every day are based on the digital platform model, but also to what extent they con-
sider certain opportunities they offer to be "important" and how much they believe they are significant
or appropriate for the digital transformation process of the insurance sector. Finally, their tendency to
use/purchase insurance services/products via digital platforms is also investigated.

The structure of this paper is as follows. In the second section, a literature review is presented. Sec-
tion 3 revolves around the methodology, and presents the research questions, and the sample. Section 4
presents the results and analysis of digital platforms in the insurance sector and the perception of
respondents from Northern Croatia. The fifth section opens up a discussion regarding the insights and
findings of this research and the last, sixth section concludes the paper.

2. LITERATURE REVIEW

The platform economy is a central pillar of the modern digital economy, fundamentally changing the
way business activities are carried out, how users communicate with each other, and the way value is
created and distributed (Parker et al., 2016). Digital platforms, as technological intermediaries, facilitate

the connection of different groups of users – consumers, producers, suppliers and other relevant stakeholders – within a single ecosystem that stimulates innovation, increases efficiency and enables dynamic market development (Moazed & Johnson, 2016). According to Lozić (2019) this business model, which is primarily based on network effects, radically redefines traditional business paradigms, introducing new forms of competition and cooperation, while at the same time allowing organizations rapid scalability and access to global markets.

Platforms usually provide the infrastructure and rules for interaction between users, and value is created by the activities of users or third parties on the platform itself (Lozić, 2019). Their

Figure 1: The core transactions of platforms
Source: Moazed, A.; Johnson, N. L. (2016) Modern Monopolies – What it takes to Dominate the 21st Century Economy, Applico, LLC; 39

key features include the ability to connect different user groups in two-way or multi-way markets, scalability supported by network effects, and the collection and use of data for continuous improvement of services (Choudary, 2015). These platforms not only facilitate interaction between users but also create new market opportunities, reduce transaction costs and enable faster introduction of innovations (Lozić, 2019). By offering infrastructure and digital tools, platforms play a crucial role in the digital transformation of various industries, enabling organizations to adapt to evolving market conditions and seamlessly integrate digital technologies into their business processes.

2.1. DIGITAL TRANSFORMATION OF THE INSURANCE SECTOR

The future of the insurance sector will undoubtedly be digital. Although the sector has been slower to experience the impact of digital technologies due to stringent regulatory frameworks, the complexity of existing portfolios and the tendency of customers to remain loyal to their existing insurers, change is inevitable. Digitalization is gradually overcoming these barriers, compelling companies to integrate new technologies and reshape business models to remain competitive and relevant in an increasingly digital market. The article "A Roadmap for a Digital Transformation" from McKinsey (2017) elaborates in detail on the approach to digital transformation in the insurance sector, highlighting that digital transformation is a key tool for achieving competitive advantage and sustainable growth. According to Mugge et al. (2020), digital transformation entails profound changes in the way business is conducted. The first step involves the adoption of a clear strategic vision and objectives that are aligned with digital initiatives. A key component is the engagement of the entire organization, from top to bottom, with leadership playing a pivotal role in fostering a culture that encourages innovation and embraces change. Organizations are encouraged to build agile teams, which iterate quickly and deliver rapid results. It is therefore recommended to invest in data analytics and technologies such as AI to enable personalized user experiences and improve business efficiency, and the implementation of digital solutions should be aligned with the redefinition of organizational processes. The need for a radical change in business culture is cited as a key challenge, where organizations must focus on continuous learning and adaptation to new technologies. Adopting digital transformation also requires adapting business models and continuously monitoring and adjusting strategies to respond to dynamic changes in the market (Matt et al., 2015). It is concluded that digital transformation is not a one-time process, but a long-term strategic imperative that requires constant evolution. Most insurers are responding to some extent, although often cautiously. Some recognize the transformative potential of digital technology in specific areas but struggle to envision its impact on the entire value chain and business model. As a result, they limit their
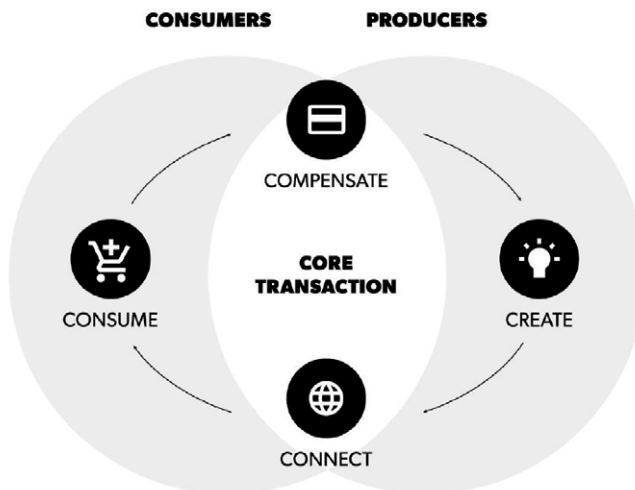
efforts to investing in new sales channels, launching service applications, or automating individual processes. However, digital transformation requires more than just technology adoption. According to Sebastian et al. (2017), it demands a well-defined digital strategy that aligns innovation with business objectives to ensure sustainable growth and competitiveness.

However, an increasing number of insurers are facing a digital reality. They know that digital technology can significantly improve the performance of their current business and that first movers have an advantage, and they are very aware that digital can give rise to completely new business models that can disrupt the sector, potentially leaving organizations that fail to adapt in a struggle for survival, as evidenced by the decline of the traditional newspaper industry. Therefore, many insurers have initiated steps toward business transformation, driven by the rise of InsurTech and emerging technologies that are profoundly shaping the digital transformation of the insurance sector.

2.2. InsurTech

In recent years, the business environment has been experiencing rapid changes, primarily driven by technological progress. These changes are forcing numerous organizations from the financial sector, including insurers, to reassess their priorities and adapt to new conditions. According to the survey "Central European Insurers and InsurTechs: Challenges, opportunities and trends" conducted by Deloitte Poland (2023), the insurance industry's current state is notably characterized by the strong impact of the previously analyzed digitalization on all aspects of the business. The traditional approach to providing insurance services is increasingly adapting to the requirements of the modern digital age, and the currently implemented technological solutions represent only the beginning of a transformation that will affect all stakeholders in the insurance market shortly (Greineder et. al, 2019). Kraus et al. (2021) assert that digitalization has become a fundamental driver of transformation across industries, enhancing user experience, optimizing business processes, reducing costs, and fostering the development of new business models and opportunities. This has proven to be particularly true for the insurance sector, where digitalization is also reshaping communication and interaction with customers, who increasingly favor digital channels such as mobile applications and digital platforms.

One of the key trends in the digitalization of the insurance sector is the emergence of InsurTech, which specifically denotes the application of innovative technologies and digital solutions in order to improve efficiency, speed, security and user experience. The InsurTech movement is a subset of the broader FinTech trend, which encompasses the application of information and communication technologies in financial services (Njegomir et al., 2021). The term InsurTech is a fusion of "insurance" and "technology"; as Cappiello (2020) describes, it represents the intersection of these two domains. More precisely, it refers to the use of technology to facilitate insurance transactions between users and insurance companies (Andrews, 2018). It encompasses various concepts, from the broad concept of digitization and the application of information technology in the operations of insurance companies to the emergence of new competitors to insurance companies that come from the technology sector entering the insurance industry (Njegomir et al., 2021).

According to the OECD publication "Technology and innovation in the insurance sector" (2017), "InsurTech" refers to new technologies with the potential to drive innovation in the insurance sector and influence regulatory practices in insurance markets. These technological innovations enabled new service delivery methods and improved data collection capabilities (OECD, 2017). The emergence of InsurTech companies has significantly reshaped the insurance sector primarily through simple access to digital technologies (Greineder et al., 2020). These companies typically use innovative technological solutions to improve business models, replacing parts or the entire value chain in the insurance sector, often positioning themselves between traditional insurers and end users (Bieck et al., 2020). Technological innovations such as Big Data analytics, artificial intelligence (AI), the Internet of Things (IoT) and blockchain have introduced new methods of service delivery and opportunities to improve the entire insurance value chain. Beyond improving the user experience (OECD, 2017), these technologies also add new value to insurance products and services (Njegomir et al., 2021). InsurTech companies are challenging traditional insurers through their flexibility, speed and scalability, as well as their ability to provide competitive and personalized services. Moreover, as previously mentioned, InsurTech is intro-
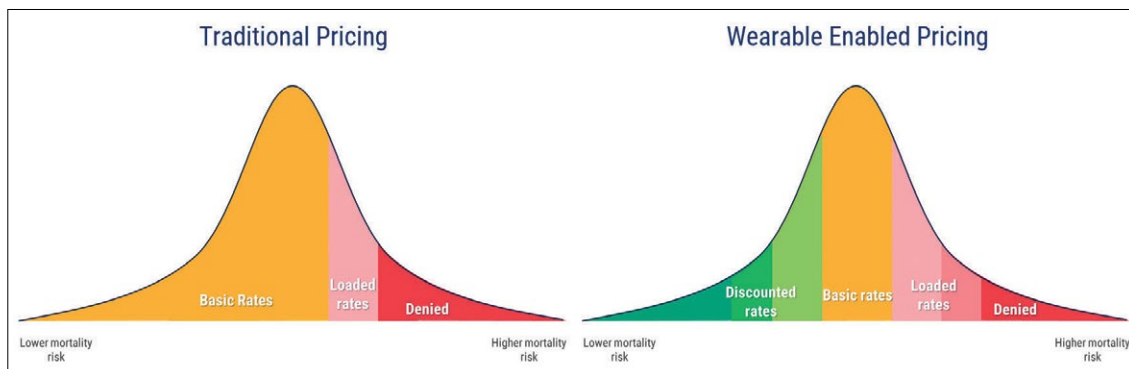
Figure 2: The difference between traditional and IoT insurance premium pricing
Source: Avenga.com. Top 10 insurance industry tech trends for 2023. https://www. avenga.com/magazine/insurance-industry-tech-trends/ (Accessed: 28. 7. 2024.)

ducing new strategies within the insurance ecosystem, which requires traditional insurers to rethink and redesign their business models to remain competitive in the market. The digital transformation driven by InsurTech is reshaping how insurers deliver value to their clients, often with a disruptive effect on existing business models (Greineder et al., 2020).

The personalization of services is becoming increasingly important. For instance, the use of chatbots enables users to quickly and easily access information about insurance products, submit claims or receive customer support (Cortis et al., 2019). Additionally, the aforementioned digital technologies facilitate the collection and analysis of large volumes of user data allowing insurers to offer customized and targeted insurance products to users. According to Cappiello (2020), new technologies drive the automation, standardization and increased efficiency of business processes, including online sales and digital claims handling.

Digitalization also significantly impacts insurers' internal business processes. Automation reduces errors and costs while increasing efficiency, and artificial intelligence and machine learning enhance data analysis for better risk assessment and fraud prevention (OECD, 2017). However, while investments in InsurTech innovations offer strategic advantages, they also heighten insurers' exposure to cyber threats, which escalate as digital channels expand (Njegomir et al., 2021).

In recent years, InsurTech startups have experienced significant growth, attracting substantial investments. Funding in InsurTech increased from $130 million in 2011 to $2.7 billion in 2015, reaching an impressive $235 billion in 2021. The majority of these investments are directed toward innovations in the healthcare and automotive industry, with a growing emphasis on analytics and underwriting, particularly in risk assessment (Cappiello, 2020). Rather than being perceived as a threat, InsurTech startups are increasingly regarded as valuable partners to traditional insurers. This collaborative model includes investments in venture capital funds, strategic partnerships, the establishment of accelerators and incubators, and the acquisition of InsurTech companies.

The term InsurTech insurance refers to a modern financial service that encompasses products, digital innovations, and technologies aimed at developing digital solutions to optimize various processes. These advancements enhance user experience, efficiency, speed, and security in insurance services while enabling the creation of more advanced and innovative products. InsurTech innovations involve the application of cutting-edge technologies, with a particular focus on the Internet of Things (IoT) and artificial intelligence (AI), which play a crucial role in modernizing the insurance sector.

2.2.1. Internet of Things (IoT) in Insurance

Among the many innovations within InsurTech, the Internet of Things (IoT) stands out as a transformative technology. It is defined as a "network of objects (devices) connected via the internet for the purpose of collecting, transmitting, receiving, and exchanging information crucial for decision-making"

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(Ćurak, 2020). The term IoT refers to the interconnection of billions of physical devices worldwide, equipped with sensors and software, actively gathering and sharing data via the internet.

According to Chatzara (2020), the rise of IoT and rapid technological advancements have had a profound impact on the insurance sector. InsurTech, and particularly IoT applications tailored for insurance, influence every aspect of an insurer's operations - from product design and development to pricing, risk assessment, sales, distribution, claims processing, and post-sale services. In terms of internal business processes, insurers perceive IoT as an opportunity to reduce costs, enhance risk assessment, personalize insurance products, optimize premium pricing, and improve claims management and loss prevention (Chatzara, 2020).

Njegomir et al. (2021) conclude that IoT enhances insurer performance by lowering costs and improving the customer experience while enabling more precise risk assessment. With access to a greater volume of risk-related data, insurance companies can minimize the financial impact of claims and offer lower premiums to policyholders who present reduced risk.

2.2.2. Artificial Intelligence (AI) in insurance

The integration of artificial intelligence (AI) marks one of the most transformative advancements in the insurance sector, introducing innovations that enhance risk assessment, product personalization, optimize business processes, and improve the overall user experience (Zarifis & Cheng, 2022). Traditional risk analysis methods often rely on historical data and standard statistical models, which may be insufficient for accurately predicting future risks. AI and machine learning (ML) facilitate the processing of vast amounts of data from diverse sources, including unstructured data such as social media, search history, and transaction records, to improve the accuracy of risk assessments (Aziz and Dowling, 2018). To fully leverage these extensive datasets and their analytical potential, insurers have increasingly adopted AI-driven techniques. As noted by Zarifis and Cheng (2022), AI-powered FinTech and InsurTech represent another transformative phenomenon. Given that many FinTech and InsurTech firms are startups, their rise could drive significant changes for established players in the financial and insurance sectors.
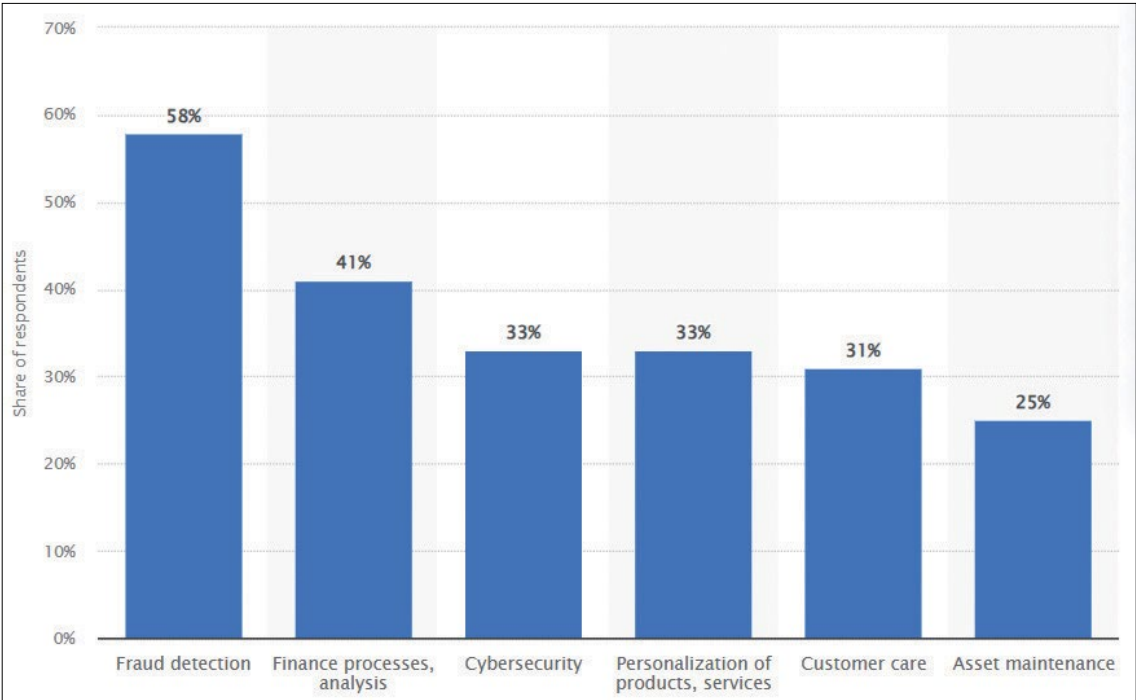

Figure 3: Areas of use of artificial intelligence in financial services and insurance
Source: Statista Search Department. AI use cases in financial services industry worldwide as of 2020. Available at: https://www.statista.com/statistics/ 1239046/top-saas-countries-list/ (Accessed: 12. 8. 2024.)

3. METHODOLOGY

The main objectives of the research are therefore (objectives 1 and 3 refer to secondary research, and objectives 4 – 5 refer to primary research):

1. To determine what digital transformation is and how much it is needed by the traditional insurance sector
2. To determine how InsurTech innovations contribute to the digital transformation of the insurance sector
3. To analyze the platform model and present specific case studies from the insurance sector in the world and Croatia
4. To examine how many respondents consider the digital platform model to be a solution for the digital transformation of the insurance sector
5. To examine respondents' inclination toward using digital platforms for purchasing insurance products and contracting insurance services

Based on these objectives, the following research questions were set:

- RQ1: How do respondents perceive the digital platform model as a solution for the digital transformation of the traditional insurance sector?
- RQ2: What are the key drivers and barriers affecting respondents' adoption of digital platforms for insurance services?
- RQ3: What is the level of acceptance of digital platforms among respondents for insurance product purchases and service contracting?

The primary objective of this paper is to assess the necessity of digital transformation in the insurance sector and validate the impact of InsurTech innovations and emerging technologies (such as IoT and AI) that have the potential to drive digital transformation within the industry. Next, the study will outline the characteristics and functionality of digital platforms, highlighting key examples, including one from the global market and another from the Republic of Croatia.

The survey research will assess the potential for digital transformation in the insurance sector through the digital platform model by analyzing respondents' opinions on its viability as a solution, as well as their willingness to use digital platforms for purchasing insurance products and contracting insurance services.

4. RESULTS AND ANALYSIS OF DIGITAL PLATFORMS IN THE INSURANCE SECTOR

Digital transformation is significantly changing business models and strategies within the insurance sector, driving a shift from traditional value chains toward integrated digital ecosystems. This paper explores how digital platforms are transforming the insurance sector, highlighting the importance of strategic collaboration with technology partners, adapting to evolving business models, and focusing on customers to ensure long-term sustainability and growth.

Two notable examples of this transformation are Lemonade, a global pioneer in digital insurance, and LAQO, the first fully digital insurer in the Republic of Croatia. These are digital platforms that have completely changed the way consumers access insurance. Lemonade, an American InsurTech company, leverages artificial intelligence and advanced analytics to streamline the purchase and claims processing of insurance policies. Their model enables users to seamlessly contract insurance policies via a mobile application and file and settle claims within minutes. With a transparent and socially responsible business model, Lemonade has attracted millions of users, especially among the younger generations who prefer digital solutions. On the other hand, LAQO is the first fully digital insurance brand in Croatia, and through its intuitive platform offers similar advantages in the domestic market. These two examples illustrate how digital platforms not only make it easier for users to access insurance but also disrupt traditional business models by introducing innovations aligned with the evolving demands of modern markets.

The primary research was conducted through a fully anonymous survey administered via Google Forms. The collected data was later analyzed and applied to this study. This research method was select-

ed primarily due to its cost-effectiveness, along with several advantages such as rapid data collection, unrestricted accessibility, and the flexibility for respondents to participate at their convenience. The online questionnaire was designed by the author in alignment with the predefined research problem, subject matter, research questions, and objectives.

Case Processing Summary

		N	%
Cases	Valid	235	100,0
	Excludedᵃ	0	,0
	Total	235	100,0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
,906	21

Figure 4: Cronbach´s Alpha coefficient
Source: Authors' work, based on IBM SPSS Statistics

The research was conducted over a period of more than a month, from April 17 to May 28, 2024. The questionnaire was distributed to friends, colleagues, and business partners in the financial sector via email, as well as through the WhatsApp and Viber applications. Additionally, the survey was published on the professional social network LinkedIn.

The survey questionnaire was completed by individuals of varying ages, genders, and educational backgrounds. The survey was primarily intended for respondents from the financial sector or those with relevant prior knowledge of digital transformation, so the sample was intentional and convenient. Before the survey commenced, respondents were informed about the research procedure and assured anonymity, with the collected data used exclusively for the preparation of this thesis. The survey was conducted on a sample of 235 respondents, all of whom answered every question except for the one specifically directed at employees.

The survey questionnaire consisted of 45 questions divided into six sections (A to F), with the most relevant questions analyzed in this chapter. Section A included six questions on respondents' socio-demographic characteristics (gender, age, county of origin, level of education and employment status, with a sub-question in which industry, sector or activity they are employed). Section B assessed knowledge of key research concepts (digital transformation, digital platforms, InsurTech), while Section C focused on the digital transformation of the insurance sector. The remaining sections featured 21 questions measured on a Likert scale, ranging from 1 (lowest) to 5 (highest).

The questions primarily focused on the set research objectives and questions related to the primary research. Section D covered general topics on digital platforms, while Section E examined respondents' overall satisfaction with using digital platforms, addressing Research Question 1. The final section (F) specifically assessed respondents' tendency to use digital platforms in the insurance sector, aiming to answer Research Question 2. By expressing their opinions and attitudes - agreeing or disagreeing with specific statements - respondents provided answers to the research questions, thereby contributing to the achievement of the predefined research objectives.

Part of the research results were analyzed using Microsoft Office Excel, while the majority were processed with IBM SPSS Statistics, a software designed for statistical data analysis and various analytical procedures.

The reliability of the study was assessed using Cronbach's Alpha coefficient, which evaluates the reliability of measurement scales, particularly Likert-scale questions. This coefficient measures the internal consistency of a set of statements and evaluates the reliability of measurement scales, ranging from 0 to 1, where values closer to 1 indicate a higher reliability of the measurement instrument.

Research Questions were analyzed in detail using descriptive statistics, including measures of central tendency—arithmetic mean, median, and mode—as well as measures of variability such as range, standard deviation, and variance.

Pearson's correlation coefficient was used to measure the relationship between two variables, expressed in unit-free terms, independent of the specific measurement units of the variables. This coefficient is applied when there is a linear relationship and a continuous nominal distribution between the variables.

This study first examined Cronbach's Alpha coefficient to assess research reliability and then presented the collected results, aligned with the primary research objectives and predefined research questions, through tables and graphs.

Cronbach's Alpha coefficient was calculated on 21 items, rated by the respondents on a Likert scale from 1 to 5, with a 95% confidence level. Based on the data obtained, the coefficient was 0.906, indicating a high level of reliability, so the research results can be accepted without reservation.

Table 1 presents the sociodemographic characteristics of all respondents, including their gender, age, county of residence, level of education, and employment status. Additionally, respondents who selected

Table 1: Sociodemographic profile of respondents

Category	Number of respondents	Percentage (%) of total respondents
Gender:		
Male	127	54,0%
Female	108	46,0%
Non-binary	0	0,0%
Age:		
18-25	24	10,2%
26-34	63	26,8%
34-45	90	38,3%
46-55	46	19,6%
56 and above	12	5,1%
County of residence:		
Međimurska	100	42,6%
Varaždinska	67	28,5%
Koprivničko-križevačka	20	8,5%
Krapinsko-zagorska	0	0,0%
Zagrebačka	5	2,1%
Grad Zagreb	27	11,5%
Other	16	6,8%
Highest level of education:		
Primary education	0	0,0%
Secondary education	65	27,7%
Undergraduate degree (Bachelor's)	77	32,8%
Graduate degree (Master's)	75	31,9%
Postgraduate degree (PhD or higher)	18	8,%
Employment status:		
Student	19	8,1%
Unemployed	4	1,7%
Employed (full-time or part-time)	206	87,7%
Retired	3	1,3%
Freelance/Temporary work	3	1,3%
Industry of employment:		
Education	26	11,1%
Financial and insurance activities	77	32,8%
Trade and transportation	22	9,4%
Tourism and hospitality	13	5,5%
Manufacturing industry	11	4,7%
Construction	4	1,7%
Arts, sports and recreation activities	6	2,6%
Other	50	21,3%

Source: Authors' work, data analyzed in Microsoft Excel.

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"Employed" under employment status were asked to specify the industry, sector or activity in which they work.

The majority of respondents were male (127), accounting for 54.0% of the total sample, while 108 respondents were female (46.0%). The largest age group consisted of respondents aged 34 to 45 years, totalling 90 (38.3%), whereas the smallest group comprised respondents over 56 years

Figure 5: The importance of digital transformation in the insurance sector
Source: Authors' work, data analyzed in Microsoft Excel

old, with only 12 individuals (5.1%). The largest number of respondents comes from Međimurje County, totalling 100 (42.6% of the total sample), while a significant share also consists of respondents from Varaždin County, totalling 67 (28.5%). As a significant share of respondents originates from the counties of Northern Croatia, the findings are particularly relevant to this study, which focuses on perspectives from this area. In terms of the level of education, the two categories are nearly equally represented, with 77 respondents (32.8% of the total sample) having completed undergraduate studies, and 75 respondents (31.9%) having completed graduate studies. A total of 206 respondents, accounting for 87.7% of the total sample in the Employment Status category, selected "Employed", and the largest share of employed respondents, 77 (36.8% of the total sample), work in the financial or insurance sector.

Section C of the survey questionnaire examines attitudes toward the necessity of digital transformation in the insurance sector, aiming to demonstrate its importance for the traditional insurance industry, which was one of the main research objectives. A key survey question posed to respondents to confirm this was: *"To what extent do you agree that digital transformation plays a crucial role in improving the insurance sector?"*. As shown in Figure 5, 102 respondents (43.4%) agreed, while 66 (28.1%) fully agreed. Only 13 respondents (5.6%) believed digital transformation is not essential, while 54 (23.0%) remained neutral.

Figure 6 illustrates respondents' perspectives on which business model and/or technological innovation could serve as the key driver of digital transformation in the insurance sector. The provided response options included: new technologies (AI, IoT), improvement of users' digital literacy, digitalization of business processes, digital platform models, improvement of financial literacy, and a shift away from traditional organizational management.
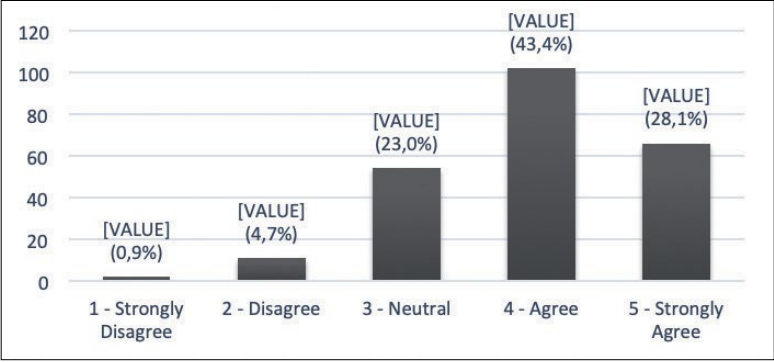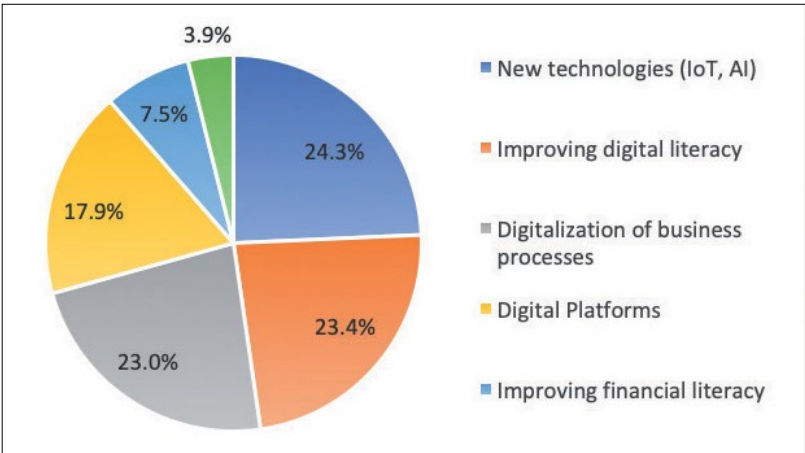

Figure 6: Key drivers of digital transformation in the insurance sector
Source: Authors' work, data analyzed in Microsoft Excel.

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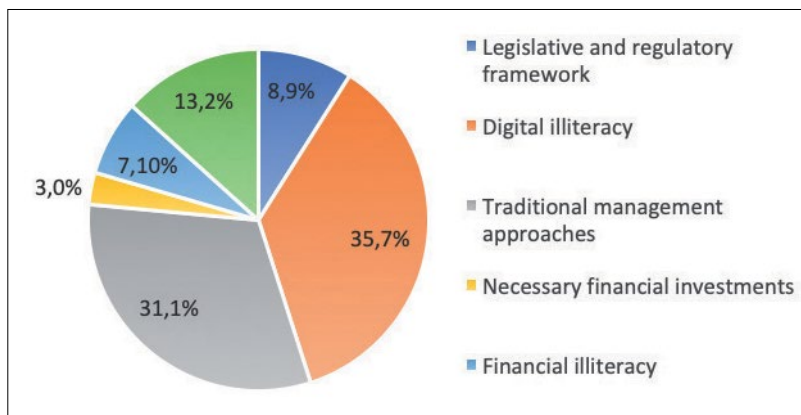PODRAVINA Volumen 24, broj 47, Str. 82 – 97 Koprivnica 2025.

Figure 7: Main obstacles to digital transformation of the insurance sector
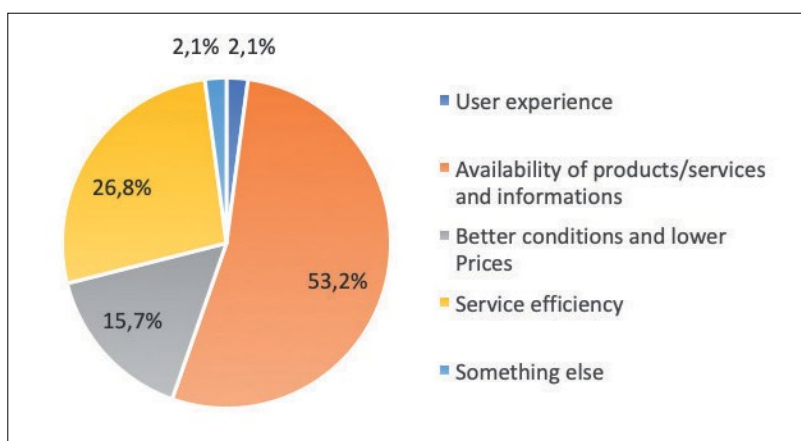**Source:** Authors' work, data analyzed in Microsoft Excel.

Figure 8: Main advantage of using digital platforms for purchasing insurance products/ services
Source: Authors' work, data analyzed in Microsoft Excel.

The highest number of respondents (57, or 24.3%) identified the emergence of new technologies (AI, IoT) as the most crucial driver. A close second was the improvement of digital literacy, selected by 55 respondents (23.4%), followed by the digitalization of business processes, chosen by 54 respondents (23.0%). Meanwhile, 42 respondents (17.2%) considered digital platforms as the key business model for digital transformation.

It is important to highlight that the first three factors - technological advancements, digital literacy, and process digitalization - are essential requirements for the effective implementation of digital platforms. Consequently, these results reaffirm the necessity of digital transformation in the insurance sector and highlight the potential for adopting digital platform models, providing an answer to Research Question 2.

Figure 7 illustrates the main obstacles to the digital transformation of the insurance sector, highlighting two critical challenges. Digital illiteracy, cited by 84 respondents (35.7%), emerged as the primary barrier, emphasizing the need for improved digital competencies. Traditional organizational management, identified by 73 respondents (31.1%), was the second major impediment.

Figure 8 illustrates the main advantages of using digital platforms for purchasing products and services. The primary benefit, cited by 125 respondents (53.2%), is the availability of products, services, and information. Additionally, 63 respondents (26.8%) highlighted service efficiency, while 37 respondents (15.7%) pointed to better conditions and lower prices.

In response to the question, *"Would you use digital platforms for purchasing insurance products/ services?"* the majority of respondents, 97 (41.3%), answered "very likely," while an additional 67 (28.5%) also responded positively. Since only 25 respondents (10.6%) answered negatively, these findings support RQ1, indicating that respondents perceive the digital platform model as a viable solution for the digital transformation of the traditional insurance sector, and RQ3, confirms a high level of acceptance of digital platforms for insurance purchases.
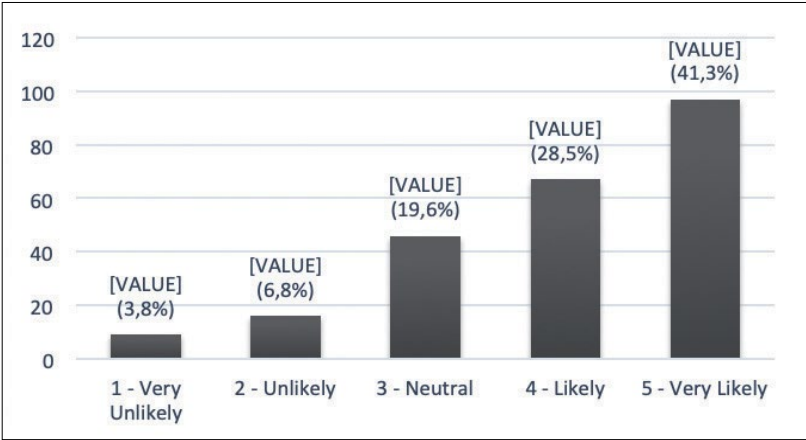
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Figure 9: Interest in using digital platforms for insurance purchases
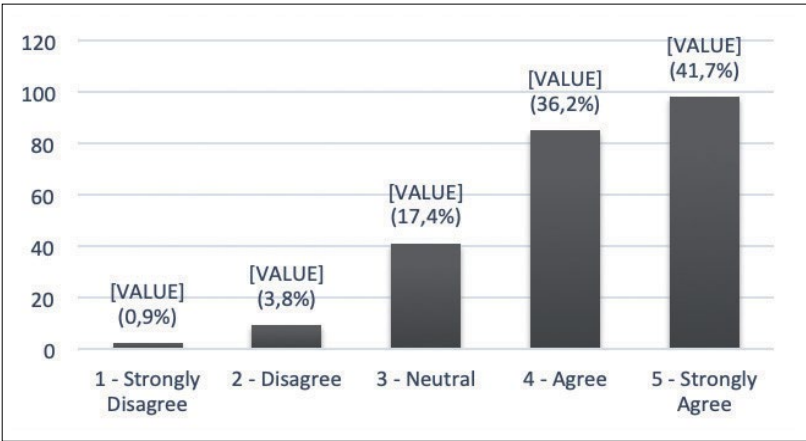**Source:** Authors' work, data analyzed in Microsoft Excel.

Figure 10: Effectiveness of digital platforms in providing insurance information
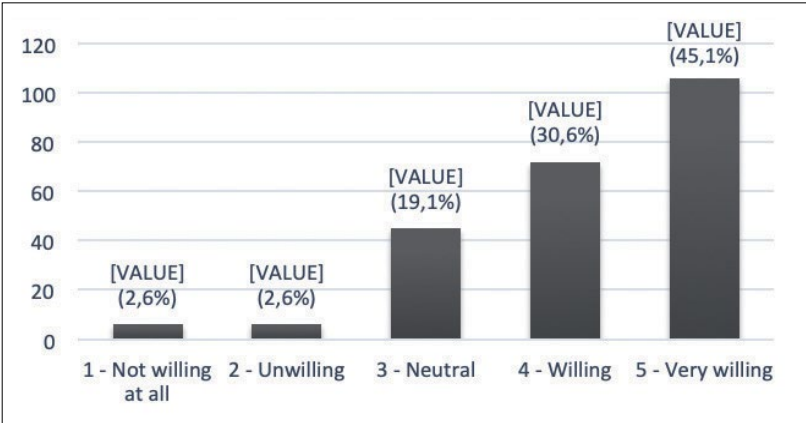**Source:** Authors' work, data analyzed in Microsoft Excel.

Figure 11: Willingness to transfer insurance from a traditional provider to a digital platform
Source: Authors' work, data analyzed in Microsoft Excel.

A significant number of respondents confirm the statement that digital platforms can facilitate access to information. Specifically, 183 respondents (77.9%) selected either 5 – Strongly Agree or 4 – Agree. The results provide answers to the research questions and indicate that respondents are highly inclined to use digital platforms for obtaining insurance-related information and, ultimately, for purchasing insurance products and services – aligning with RQ3.

The following survey question, supporting RQ3, asked: *"How willing would you be to transfer your insurance from a traditional insurance company to a digital platform if it offered better conditions and lower premiums?"* The majority of respondents, 106 (45.1%), answered 5 – Very willing, followed by 72 respondents (30.6%) who selected 4 – Willing. Meanwhile, 45 respondents (19.1%) remained neutral. Only 12 respondents (5.2%) provided a negative response, with six selecting 1 – Not willing at all
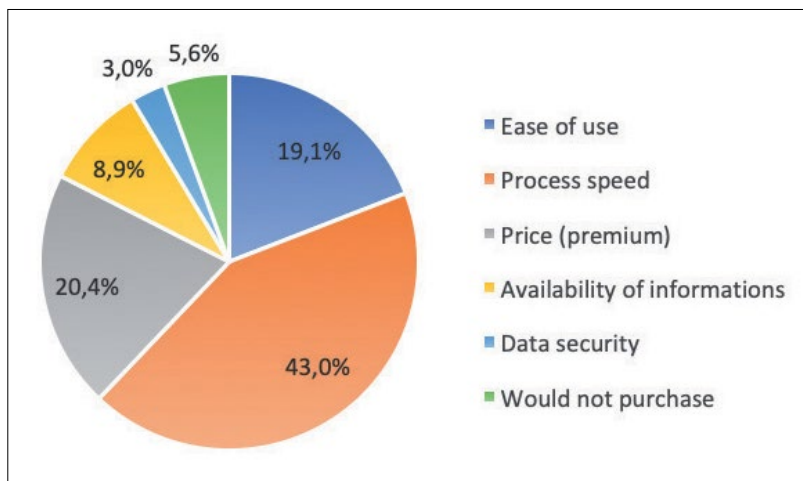
Figure 12: Key factors influencing insurance purchase via digital platforms
Source: Authors' work, data analyzed in Microsoft Excel.

and five choosing 2 – Unwilling. Given that most respondents are from the financial and insurance sectors, these findings suggest that even industry professionals are open to transferring their insurance to digital platforms, despite this shift contradicting traditional business models within their organizations.

Finally, another key question related to Research Question 3 (RQ3) was analyzed: *"What do you consider the key factor that would encourage you to purchase insurance products/services via digital platforms?"* The responses to this question provide valuable insight into the primary drivers of digital insurance platform adoption.

The most critical factor, cited by 101 respondents (43.0%), was process speed, indicating that traditional insurance policy contracting methods are perceived as slow and cumbersome. Additionally, 48 respondents (20.4%) identified insurance price (premium) as a key motivator, while 45 respondents (19.1%) emphasized ease of use, which aligns with the importance of process speed. Data security was selected by 9 respondents (3.8%), whereas only 11 respondents (4.7%) stated that they would not purchase insurance through digital platforms - representing an insignificant portion of the total sample.

5. DISCUSSION

The results of the survey conducted for the initial master's thesis and later for this study clearly indicate a positive attitude among respondents toward digital platforms in the insurance sector. Respondents demonstrated a high level of acceptance and willingness to use digital platforms for purchasing insurance products and services, thereby confirming the stated Research Questions. Data were collected from a sample of 235 respondents, primarily employed in the financial sector, through a fully anonymous survey questionnaire.

The results were processed using the IBM SPSS Statistics software, and the reliability of the research was confirmed by a high Cronbach's Alpha coefficient of 0.906, indicating strong reliability of the measurement scales. Descriptive statistical analysis revealed that respondents highly value transparency, access to information, improved user experience, and the process efficiency that digital platforms offer. The mean values for key questions range between 3.77 and 4.14, reflecting generally positive perceptions, while standard deviations are mostly below 1, suggesting consistency in respondents' attitudes Pearson's correlation coefficient further confirmed significant positive correlations between various aspects of digital platform usage, such as the tendency to explore new platforms and the perception of improved customer support. The strongest correlations were observed between respondents' readiness to use digital platforms and their inclination to explore innovative insurance products. Additionally, a strong correlation was found with the willingness to transfer insurance from traditional insurers to digital platforms, further supporting the research questions outlined in this study.

The results also indicate the key advantages of digital platforms, such as information accessibility and process efficiency, which respondents identified as the primary factors encouraging their use. Despite these advantages, the main obstacles to digital transformation in the insurance sector include digital illiteracy and traditional management models, indicating the need for further education and adaptation of business models.

The research also revealed certain limitations that should be considered for an accurate interpretation of the results. Primarily, the sample of 235 respondents is not sufficiently large to generalize the findings to the broader population. Additionally, the sample was purposive and convenient, consisting mainly of respondents from the financial sector, which may lead to bias and limit the diversity of opinions. Furthermore, the survey was conducted exclusively online, with data collected solely through the authors' personal and professional social networks and e-mail, which may impact the representativeness of the sample. The use of a Likert scale for most questions may have limited the depth of insight into respondents' views and could have encouraged socially desirable responses, potentially affecting the accuracy of the collected data. Additionally, the research timeframe from April 17 to May 28, 2024, may have influenced the results due to possible changes in technology or events in the insurance sector during that period.

Despite the high reliability of the measurement instruments, as confirmed by Cronbach's Alpha coefficient, the subjective nature of the survey questionnaires poses the risk of respondents misinterpreting questions or providing imprecise answers. Therefore, these limitations should be considered when interpreting the results and drawing conclusions from this research.

However, despite the mentioned limitations, this research provides a strong foundation for further innovation and strategic decision-making within the insurance sector. The findings confirm that digital platforms have the potential to enhance transparency, trust, and the overall customer experience significantly. The results of this survey can serve as a guideline for implementing digital strategies that enable insurance companies to sustain a competitive advantage in today's digitally transformed environment.

6. CONCLUSION

Overall, the research results indicate the need for digital transformation in the insurance sector and confirm that digital platforms are solutions that can enable insurers to meet the increasingly demanding needs of modern consumers. The results of the primary research conducted through a questionnaire on a sample of 235 respondents mainly from Northern Croatia clearly indicate a positive attitude towards the use of digital platforms for purchasing insurance products and services. Respondents recognized the benefits of digitalization, including improved user experience, speed and simplicity of claim processing, and increased transparency.

These results confirm the research questions posed, indicating that digital platforms can serve as a solution for the digital transformation of the insurance sector and that there is a significant tendency among respondents to use them. In addition, the empirical analysis showed high reliability of the collected data, which further confirms the validity of the conclusions presented in the paper. However, the research also highlighted certain limitations, including the convenient and purposive sample, which mainly consists of respondents from the financial sector, which may affect the generalizability of the results. Nevertheless, the conclusions of this research provide a solid basis for further research and innovation and the development of digital solutions within the insurance sector in order to successfully adapt to market changes and ensure its long-term survival.

In conclusion, it can be said that the digital transformation of the insurance sector through digital platforms is not only possible but also necessary to ensure long-term sustainability and competitiveness. Given all of the above, it is recommended to further invest in the development and implementation of digital solutions that will enable insurers to meet the increasingly demanding needs of the modern financial market and to ensure their survival in the digital business environment.

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SAŽETAK

Dinamično poslovno okružje današnjice zahtijeva digitalnu transformaciju kao neizbježan faktor koji oblikuje razvoj različitih industrija i sektora, uključujući financijski i sektor osiguranja. Iako se financijski sektor relativno brzo prilagodio zahtjevima suvremenog digitalnog okruženja, osigurateljni sektor suočava se s izazovima u svojoj tranziciji prema digitalnoj transformaciji.

Ovaj rad bavi se upravo tom temom, analizira ključne pojmove digitalne transformacije te istražuje mogućnosti primjene modela platformi u Republici Hrvatskoj i mišljenja ispitanika iz sjeverne Hrvatske. Jedan od ciljeva rada je pružiti detaljniji uvid u mogućnosti digitalne transformacije osigurateljnog sektora te identificirati korake nužne za ostvarenje tehnoloških i poslovnih inovacija u ovom sektoru.

Kroz empirijsko istraživanje provedeno na uzorku od 235 ispitanika analizira se potencijal digitalne transformacije osigurateljnog sektora kroz model digitalnih platformi, ispitujući mišljenja i stavove ispitanika o tome može li model platformi biti rješenje za digitalnu transformaciju osigurateljnog sektora. Također se istražuje sklonost ispitanika korištenju digitalnih platformi za kupnju osigurateljnih proizvoda ili ugovaranje osigurateljnih usluga u sjevernoj Hrvatskoj.

Provedena je deskriptivna studija korištenjem online anketnog upitnika. Rezultati istraživanja pokazuju da su ispitanici iz sjeverne Hrvatske skloni platformskom modelu kao optimalnom rješenju za digitalnu transformaciju osigurateljnog sektora, što ukazuje na rastuću svijest o prednostima koje digitalne platforme donose, kao i na potrebu za njihovom implementacijom kako bi se osigurateljni sektor uspješno prilagodio suvremenim tehnološkim trendovima i zahtjevima tržišta.