





INTERNATIONAL SCIENTIFIC CONFERENCE

# THE DYNAMICS OF MODERN LEGAL ORDER

THEMATIC CONFERENCE PROCEEDINGS

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## University of Priština in Kosovska Mitrovica FACULTY OF LAW

# INSTITUTE OF CRIMINOLOGICAL AND SOCIOLOGICAL RESEARCH Belgrade

# INSTITUTE OF COMPARATIVE LAW Belgrade

International Scientific Conference "THE DYNAMICS OF MODERN LEGAL ORDER"

University of Priština Kosovska Mitrovica Faculty of Law



# Institute of Criminological and Sociological Research Belgrade



#### Institute of Comparative Law Belgrade



International Scientific Conference

#### THE DYNAMICS OF MODERN LEGAL ORDER

Thematic Conference Proceedings

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### University of Priština in Kosovska Mitrovica FACULTY OF LAW

## INSTITUTE OF CRIMINOLOGICAL AND SOCIOLOGICAL RESEARCH Belgrade

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## THE IMPACT OF DIGITALIZATION ON INSURANCE CONTRACT AND INSURED'S RIGHTS<sup>1</sup>

#### Summary

The author examines the legal implications of using digital technologies in insurance law in the context of protection of insured's right as a weaker contractual party. The central part of the paper is dedicated to the process of personalization, i.e., the possibility of offering insurance cover that fully corresponds to the needs and profile of the insured, based on data obtained by the insurer while using digital technologies. However, since this process contradicts some of the basic principles of insurance industry, the question arises regarding the protection of the insured's rights when the personalization has not been conducted adequately, and thus the premium and cover do not meet the needs of the insured that motivated him to conclude an insurance contract in the first place. Comparative legal analysis shows that this issue is still not regulated, indicating that provisions of consumer protection regulations must be applied. This is also the case with the legislation of the Republic of Serbia, where certain answers can be found in the Consumer Protection Law and in the Law on Contract and Torts.

**Key words:** insurance, personalization, consumer protection, premium, cover.

#### 1. INTRODUCTION

Fourth Industrial Revolution is slowly turning into the Fifth Industrial Revolution that is characterized by vanishing distinctions between physical, digital and biological (Howells, 2020, 145). Even though the coming period will be focused on concepts such as sustainability, human-centeredness or concern for environment, it will still be accompanied

<sup>&</sup>lt;sup>1</sup> This paper is a result of the research conducted at the Institute of Comparative Law financed by the Ministry of Science, Technological Development and Innovation of the Republic of Serbia under the Contract on realization and financing of scientific research of SRO in 2024 registered under no. 451-03-66/2024-03/200049.

by the transformation of the industrial structure through the utilization of Internet of Things, Big Data,<sup>2</sup> AI, which all were the landmarks of the Fourth Industrial Revolution. Innovations around information technology definitely transformed and deeply influenced the further development of society and its social and economic aspects (Baldwin, 2016). The usage of data, data science and analytic tools that enable extracting insights from a great amount of randomly collected data still remains viable field in many commercial sectors due to importance of collected information.

Financial sector is accordingly one of the sectors in which the rapid changes and development are to be noticed on a daily level. Exception in that sense isn't an insurance industry in which the process of digitalization can largely contribute to different phases: from improving product development and underwriting, to revamping distribution tactics, consumer interactions, and business models. At the same time, digital capabilities make it easier for new entrants, including non-insurers, to acquire segments of the insurer's value chain (Albrecher *et al.*, 2019, 354). Given features were the focus of research regarding insurance industry at the beginning of the century. Nowadays focus is more on the new insurance products that are more situation- and demand based, like cyber insurance, on underwriting of automatic algorithmic decision-making process, data protection, elimination of informational asymmetry (Baranauskas, 2021, 70). All these features of the insurance market stem from the fact that a great amount of information is now available everywhere and to everyone.

#### 2. USAGE OF DIGITAL TECHNOLOGIES IN INSURANCE INDUSTRY

Individuals use and rely on technologies immensely while information become easily available, at arm's length due to usage of social media, smart devices, cookies, etc. A great number of devices that we all use on a daily level make records on the users' behavior and transforms them into data (Cohen, 2019, 15-25). Even though it was not necessary to design and process information in this manner, recognition of the value of data determined the online service providers to act in a given way. Manners in which data can be used include, among others, personalization of commercial communication (offers, ads), monitoring the demands for certain products or optimizing certain processes, controlling fraudulent behavior. In a blink of an eye personal profile of each individual and one's behavior can be defined (Mantelero & Vaciago, 2013, 161-169).

When it comes to insurance contracts, the given statement becomes even more obvious because information represents the most valuable resource in terms of an insurance contact. Not having adequate information makes it impossible for the potential customer to evaluate the object of the agreement, as well as its costs and benefits, while the insurer

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<sup>&</sup>lt;sup>2</sup> Big data is also understood as "high-volume, high-velocity and/or high-variety information assets that demand cost-effective, innovative forms of information processing that enable enhanced insight, decision making, and process automation" (Południak-Gierz, 2018, fn. 3).

potentially faces an adverse selection phenomenon.<sup>3</sup> For that reason, insureds use internet-based technologies to do research on products that suits their needs while comparing the prices offered by several insurers, whilst insurers use technologies to collect as much as possible information on the potential insured in order to define their profile. Value-chain in insurance industry is now largely affected by the process of digitalization that defines a great amount of primary and side activities conducted by insurers. The given feature of the insurance industry is mostly a post-covid product in which the insurers had to rethink and remodel their business practice.<sup>4</sup> Remodeling was focused on offering new products, more personalized and usage-based services. Some of the benefits of using technologies in insurance sector is providing more precise pricing, building accurate risk profiles of the insureds, reducing uninsurance and over-insurance, comparing insurance precise in order to find the most suitable and affordable one, elimination of the information asymmetry that accompanies insurance contracts.

Worldwide we already have examples of this process. In automobile insurance industry,<sup>5</sup> telematics insurance provides services of local determination, road assistance, etc. and collecting the data on the insured which contributes largely to more precise pricing and actuarial accuracy.<sup>6</sup> Analyzing telematics data on cars using algorithms of machine learning, services of insurance companies with AI create personalized risk profiles for drivers (Lupačov & Stanković, 2022, 80). Some insurance companies use the data collected in order to enable drivers to get some discounts if they use safe driving habits. The system of insurance using AI is capable of determining how serious the damage is, assess the costs of repair and analyze the impact of the accident on future premiums for the given driver. Also, majority of insurance companies have implemented a system which enables them to quickly accept automated solutions for taking on complex risks with new clients in life insurance. The system actually learned to digitalize data from scanned medical records, photos, faxes, tables and other sources and that process was almost impossible in the past. After certain period of time, insurers are able to define accurately the profile of the insured which enables

<sup>3</sup> Siegelmann, 2004, 1223-1225.

<sup>&</sup>lt;sup>4</sup> Raise of the awareness of the necessity of insurance, new risks, distance market are just some of the factors that definitely changed the insurance market.

<sup>&</sup>lt;sup>5</sup> About 7–10% of AXA Japan customers cause a car accident every year and 1% of it are large-loss accidents with large insurance sums. For that reason, insurer AXA turned to Google TensorFlow to build deep neural networks to analyze large amounts of customer data to predict potential losses, in order to optimize prices for their motor insurance policies. The AXA team has achieved an accuracy rate of 78% in its predictions. This provides AXA with useful applications to achieve higher profits, including creating new insurance services such as real-time pricing at the point of sale. (Kuma & Srivastava & Bisht, 2019, 81).

<sup>&</sup>lt;sup>6</sup> Health insurance industry is also suitable for the use of such technologies. Information as age, health history, certain habits define the scope of insurance. Usage of those technologies would enable to insured to provide insurer with information on daily activity or exercising time via telematic channel and then to receive calculated premium using this kind of data.

accuracy in pricing, in a more efficient and prompt way while also offering a possibility to offer more insurance products (Rose, 2013, 1-9).

Despite the fact that nowadays insurers aim at establishing new way of doing business, offering new products while relying on digital service providers (Stoeckli & Dremel & Uebernickel, 2018, 285-307), some of them still face many obstacles while trying to offer and use information gathered though digitalization of insurance contract. When compared to banking sector, it is clear that insurance sector is still trying to keep up the pace with the given trends and despite all the efforts (Baranauskas & Raišienė, 2021, 188). First of all comes the question of how to obtain all the information and keep a record on them. Also, potential insureds are not always willing to share their personal information. They do however have expectations that their insurance product and premium will be personalized in accordance with better risk segmentation (Popović & Anišić & Vranić, 2022, 125). In the case of the insurance market and organizations, recent years have shown a continuous adaptation of technological innovations, as well as a shift in focus to user-driven product customization and personalized service. Insurers also face challenges in maintaining data privacy and availability because they rarely acquire raw telemetry data; they receive them summarized, which further requires that they are processed in a wise way (Albrecher et al., 2019, 352).

The listed challenges accompanying the process of digitalization of an insurance contract are partially the consequence of the fact that insurance companies haven't reached the maturity level required to fully and effectively incorporate new technologies developments into their everyday processes, products or service management systems. Lack of "maturity" also accompanies the behavior of the insureds that still hesitate to conclude their insurance contracts online if they feel need some extra information and advice, which makes simpler insurance products more suitable for online shopping.<sup>8</sup>

Due to given "obstacles" and lack of adequate response from the insurance sector, the reform of legislation still hasn't taken place, even though it is clear that unresolved issues may appear on the side of both contractual parties. The rapid pace of change makes it challenging to understand the full impact of these advances. At the moment most of the legal systems do not even recognize the principles of functioning these new technologies, despite the fact the main task ahead of the legal system is to provide need for protection of

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<sup>&</sup>lt;sup>7</sup> Personalization of consumer interactions, including product offerings, has been a focus of artificial intelligence applications in almost every corporate industry. Historically, insurance companies have excelled at selling insurance but not necessarily at cultivating customer relationships following the original sale. Customers increasingly expect similar experiences from insurers as they do with other product and service providers.

<sup>&</sup>lt;sup>8</sup> This refers to motor vehicle insurance, property insurance, certain forms of personal liability insurance. In Serbia only policies for travel insurance, car assistance, health insurance and homeowner insurance can be purchased online. For the other products potential customers can only send their inquiries online, but the answer will be given by an insurance agent who underwrites risk in traditional manner and send an offer afterwards. (Popović & Anišić & Vranić, 2022, 127).

public and individual interests. It is clear that certain changes in legal systems will have to be undertaken in order to maintain the given goal.<sup>9</sup>

Until then scholars are obliged to offer solutions for the situations in which insured believes his right from the insurance contract have been endangered. For example, insurer gathers information on a man that is young and healthy, but behaves risky while driving a bicycle because he listens to music while driving, doesn't wear helmet because he wants his hair to look well when he gets to work. He is to be considered highly risky, which will affect the personalized premium price he will have to pay that can further lead to unfair distributive outcome (Pałka & Wiśniewska, 2022, 9). Then there is the question of the treatment of a bicycle driver that gets distracted more easily due to their "personal characteristic of their mind" and not due to some conditions that can control? Will they be obliged to pay higher premium even though they can't affect or change their own behavior? Especially when one considers that the insurance thrives to distribute risks in fair manner. The end result, despite all the possible good effects for the insurance market itself, may be an expensive insurance for come insureds or even denying insurance coverage to some.

#### 3. PERSONALIZATION OF AN INSURANCE CONTRACT

It is evident that digitalization requires cooperation between analogue and digital world and ways of doing business, where the new technologies enhance interaction with customers and all the information<sup>10</sup> is available at great speed. Based on their experiences in other industries where the service providers offer digital experience, customers have grown to expect a similar experience more and more when it comes to the services supplied in insurance industry.<sup>11</sup> In the context of insurance, digitalization is understood as "the use of new technologies to industrialize and automatize processes, to change the communication between customer and insurer, and to generate and evaluate new data." (Eling & Lehmann, 2018, 363). Producing and consuming is and will be mostly taking place in the internet-based cyber-physical space that will require certain changes (Rekettye & Pranjic, 2020, 6). Even though customers are used to personal assistance from different brokers, agents and to direct channel of information, nowadays the information is mostly gathered online where products and prices can be easily compared using aggregator platforms.<sup>12</sup> Also, all processes

<sup>&</sup>lt;sup>9</sup> The presumption is that certain notions, classifactions will be discussed, while some new models will be developed as a response to social and economic changes.

<sup>&</sup>lt;sup>10</sup> Some of the information is location, search history, preferences, internet behavior, online shopping, opinions on certain subjects through social media, blogs, etc.

<sup>&</sup>lt;sup>11</sup> Insurance companies appear to be in a transitional stage in customization and personalization procedures as compared to banking sector. (Baranauskas, 2021, 71)

<sup>&</sup>lt;sup>12</sup> Lemonade CEO Daniel Schreiber believes that future insurers will not be using brokers since they will be replaced by bots and artificial intelligence will be performing the duties of actuaries (Albrecher *et al.*, 2019, 355).

are now aiming at being completely automized (processing contracts, reporting on claims, underwriting, product offering).

Due to great usage of all the devices connected to Internet and information-based systems, insurers get into insight into a personal preferences and characteristics of their potential customers, <sup>13</sup> to form their personal profile, even though the collected information is semi-structured and unstructured (Venkatesh, 2019, 92–97). This enables insurers to analyze the risks and enhance its efforts to predict when and whether the insured case will take place more thoroughly. Extending client data enables insurers to better differentiate customer group, i.e., to form smaller risk pools. Analytics approaches convert big data to understandable results for the insurers, e.g., by explaining how customers make their buying decisions and what are their habits, even in those situations in which traditional methods of analytics fail to offer an explanation (Eckert & Osterrieder, 2020, 109, 342). Gathering a huge amount of personal information on potential and existing insureds also enables insurers to better manage issues like moral hazard and information asymmetry (Powell & Goldman, 2021, 141–160).

Relying on gathered information opens variety of options for both insurer and insured and maybe the most specific use of personal data is the personalized underwriting, risk assessment for an individual. Insurance companies can monetize data by offering personalized products or by offering personalized pricing to potential insureds and products that are eligible to offer protection from specific risks. Since there are so many risks that can't be predicted and controlled, insurers try to personalize their offer as much as possible by offering extensions of coverage and policy period, by including additional risks, which all influences an insurance premium. Using Big data<sup>14</sup> they get an opportunity to get an insight into customer's needs and to offer them a customize insurance product. Artificial intelligence enables insurers to gather information from mobile devices and sensors in different facilities and location, which all leads to more precise analysis of each potential customer. Besides from personal general information on a potential customer (his age and health status) new technologies offer possibility to gain information on someone's specific behavior (a person likes listening to music while biking, is prone to distraction and refuses to wear helmet due to his haircut). 15 All this information may lead to a conclusion that the insured acts in a more dangerous way than an insured acting cautiously, which would make insurer offer the first insured a higher premium. It means that those persons perceived to exhibit larger levels of risk would experience an increase in costs, which, in addition to always being negative for these individuals, could lead to unequal distributive outcomes.

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<sup>&</sup>lt;sup>13</sup> Insurers actually obtain from certain providers (Google, e. g.) since they themselves do not have an access to them. Some of them could be search activity, website behavior, online shopping etc. (Rekettye & Pranjic, 2020, 8).

<sup>&</sup>lt;sup>14</sup> It is accessed that approximately 2.5M terabytes of data are created on a daily level. (Kuma & Dev Srivastava & Bisht, 2019, 80).

<sup>&</sup>lt;sup>15</sup> Example taken from Pałka & Wiśniewska, 2022, 8.

The possibilities that internet and the whole process of digitalization offer definitely make insurers find themselves in an even more privileged position, compared to the insured one. Apart from the fact that the insured faces difficulties to compare the prices of the insurance products, since they depend largely on the insured's risk profile, and the product quality dimensions, digital tools available to the insurers make the whole process more complicated for the insured person.

For that reason, it is obvious that the process of digitalization will require certain modifications in the fields of insurance products distribution and customer interactions, <sup>16</sup> even though none of them are still undertaken. At the same time the possibilities of insurer's misrepresentation of his insurance product and insured's misunderstanding of the insurance transaction demands however wider discussion of the rights of the insured as a consumer. There is a possibility that the application of such databases by insurers may undermine ideas of risk sharing in terms of positive distribution and social solidarity and the belief in fairness, main ideas evolving around insurance (Mullins & Holland & Cunneen, 2021, 3).

#### 4. PROTECTION OF INSURED'S RIGHT IN CASE OF MISPERSONALIZATION

Even though personalization starts to be a widespread practice among European insurers, Serbian insurance industry is still underdeveloped in this sense. The reasons for that are a required know-how, workforce and tools to analyze and implement the collected data from telematic devices, internet sources, social networks, internet sources and apps. Apart from that, this process requires a huge investment by the insurers, which explains why only the big companies can perform the process by themselves and on their own, while the others have to rely on the data collected by other companies. In Serbia digitization remains in its infancy with internet use primarily for advertising and information dissemination rather than direct sales, while artificial intelligence and blockchain are yet to make significant inroads in the Serbian insurance market (Popović & Anišić & Vranić, 2022, 124).

This however doesn't mean that the further digitalization and personalization of insurance contract will circumvent Serbian insurance market. When compared to other insurance markets, it is obvious it is just a matter of time. It is therefore necessary to consider how the consequences of the personalization that wasn't carried out in an adequate manner will be treated, especially bearing in mind that relation between the consumer and

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<sup>&</sup>lt;sup>16</sup> It is still questionable at what pace the whole process will take place since a great deal of relevant information is still to be digitalized in order to be relevant. The issues however extend beyond digitizing the data. The majority of practical machine learning applications now rely on supervised learning techniques. Supervised learning uses a training data set to help machines predict or classify fresh data. To create the training set, enrich the input data by categorizing it based on the desired output categories. Insurance, particularly reinsurance, relies heavily on expertise. Claims experience must be assessed in light of changing situations and judicial decisions.

insurer is based on trust, and in this case on trust in technology as well (Południak-Gierz, 2018, 303). The process of personalization and the tools required are not perfect and an inadequate personalization (mispersonalization<sup>17</sup>) is a possible threat.

An example that can be found in the literature is an example of the insured whose personalized car insurance contract is automatically updated due to circumstances in which he is driving (type of the road, speed, etc.) (Południak-Gierz & Tereszkiewicz, 2023, 37). In an ideal world where the tools used for personalization work unblemished, there would always be a perfect ratio of risk and premium paid accordingly. This, however, cannot always be the case, which leads to situation with risks not being covered accordingly or the cover being too broad for the given insured and the actual needs of an insured.

As previously mentioned, Big Data technology enables insurers to generate informed predictions about client behavior based on demand and pricing schemes. The outcome can be different prices to different customers, based on customer's personal characteristics. It is possible that someone gets to pay a more expensive premium because an insurer established through digital tools that this insured uses an iPhone, which further indicates he has a high-paying job. Insurers also have an option to group their potential insureds into groups when website triggers its search results based on potential consumer's characteristics, independent of their risk profile (Rekettye & Pranjic, 2020, 8).

Reasons for offering an incorrect premium or cover may also be incorrect data, error in algorithm, but also an intentional misuse of the personal situation of the insured. 18 It indicates that the incorrect premium or cover may result both from unconscionability and conscionability of the insurer, that will always be a party with an access to all this data, which enables them to control the algorithms used and better understand the legal rights and obligations (Casey & Niblett, 2017, 1401-1447). For that reason, it is obvious why the greater burden will be on the insurers and their distributors that are obliged to advice their clients accordingly. Apart from that, an insurance contract is a consumer contract, the standard of "good faith" is to be applied on the relation between contracting parties, demanding a higher standard of behavior (Eggers & Picken & Foss, 2018, 1-13). Insured is to be treated as a weaker party in an insurance contract (Petrović Tomić, 2016, 373; Glintić, 2020, 59-60), which demands rules on unconscionability to be applied in their favor when the given defectiveness was intentionally induced by the insurer or his distributor, which is also in a line with the fact that the consumer is usually unaware of the mistake and is not able to notice it.<sup>19</sup> It is the insurer who controls the insured's online environment by creating and controlling technological infrastructure and outsourcing its application (Południak-Gierz & Tereszkiewicz, 2023, 39).

<sup>18</sup> For example, a person finds out his friend lost a house during an earthquake and an insurer offer a more expensive premium even though the risk of an earthquake is very low.

<sup>&</sup>lt;sup>17</sup> Term taken from Południak-Gierz & Tereszkiewicz, 2023.

<sup>&</sup>lt;sup>19</sup> The client is persuaded that the offer he gains is in correspondence with his concrete needs which lead to the conclusion of the contract.

All the problems arising from the digitalization and personalization of an insurance contract are still not completely investigated and a new issue may appear on a daily base. Speaking in the terms of legislation, it is still a developing field in legislation field, both on national and international level in the whole world. Since the concept of legal certainty requires complex prediction models, on has to rely on the existing legislation on the insurance contract and on consumer protection at this moment. In case of the Republic of Serbia those would be Law on Contract and Torts and Consumer Protection Law.

#### 4.1. Incorrect premiums stemming from the mispersonalization

The most expected consequence stemming from the wrongly personalized insurance product is a premium wrongly charged in return for cover. In order to calculate the premium, insurer has to collect information on the insured, starting from his personal information, required type of insurance cover and other factors determining the possibility of risk realization and the extent of sum insured's payout (Petrović Tomić, 2023, 70). The usage of digital technologies and given tools moves the burden from the insured to disclose all the information relevant for the assess of the risk, despite the fact that an insurance contract is synallagmatic contract with both parties having duties towards each other. Technological development goes hand in hand with the modern trend of the insurer's duty to collect all the relevant information from the future insured, which slowly replaces the insured's disclosure duty (Petrović Tomić, 2013, 184). By accepting their information being collected and processed by the insurer for the purpose of personalization, it is the assumption that the insured has fulfilled his disclosure duty due to his limited possibilities for a pro-active approach and engagement (Alkistis & Chatzara, 2020, 49–82, 60).

Misuse of digital tools and technologies may provoke the situation where the insured pays higher or smaller prize for his risk that is to be covered through an insurance contract, while ignoring the real value of the insurance product set by the laws of the market (Bar-Gill, 2019, 217-254, 246-249). As a result, premium can be overpriced or underpriced. Insurance cover in these situations is still suitable for the insured and in line with his need to conclude an insurance contract. The only issue from the perspective of the insured.

#### 4.2. Inadequate Insurance Cover

As afore mentioned, the consequence of the malfunctioning process of the personalization may also lead to an offer of an insurance product, i. e. insurance cover inadequate to the actual needs of the insured. Despite having a contract concluded, the insured may find himself in a situation of not being covered by his policy, like he hasn't concluded the contract. The other unwanted consequence maybe the excessive cover that was neither required nor necessary. Similarly to inadequate premiums, the insured's

decision-making autonomy is strongly influenced by the process of personalization, leaving him without information necessary for deciding on the insurance cover required.

Mispersonalization of the premium and cover may count as an unfair commercial practice (Jovičić, 2017, 589-600), since the consumer's willingness to pay a higher premium or to choose an inadequate cover is unlawfully stimulated. Serbian Consumer Protection Law defines different forms of unfair commercial practice (Consumer Protection Law, 2021, art. 17-22)<sup>20</sup> and it is clear that in these cases of wrongful personalization of an insurance contract we have an example of a misleading commercial practice (Jovičić, 2019, 448). There is a trader (i.e. insurer) that induces the consumer (insured) to make an economic decision that he wouldn't otherwise make by providing him with incorrect information or by creating a general impression, or by causing fallacy regarding price or the manner in which it was calculated or the existence of certain benefits in terms of the price (Consumer Protection Law, 2021, art. 18). The whole mechanism of doing business by the insurer is designed to unlawfully stimulate an increase in client willingness to pay in order to abuse it.

Incorrect premium and cover can also be a consequence of unfair exploitation in the sense of article 21 of the Consumer Protection Law since the insured makes an economic decision that he would not otherwise have made as a result of an insurer's undue influence.<sup>21</sup>

In the legislation of the Republic of Serbia the misdemeanor law protection (along with administrative law protection) is a subsidiary mechanism of legal protection of consumer rights (Mrvić Petrović & Jovanović, 2020, 153). The primary one is protecting right in litigation and for that reason the main focus of the next chapter will be on this aspect.

#### 4.3. Legal responses

The party whose financial interests are infringed can firstly seek protection of his rights within the individual protection mechanisms provided by national private law regulation. The possible legal responses of this kind of mispersonalization could be invalidity or voidability of the contract, damage claim and contract adjustment (Południak-Gierz & Tereszkiewicz, 2023, 41).

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<sup>&</sup>lt;sup>20</sup> These articles reflect art. 11 Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council ('Unfair Commercial Practices Directive').

<sup>&</sup>lt;sup>21</sup> Undue influence is to be undersood as the abuse of a position of power in order to exert pressure on the consumer in a way that significantly limits the ability to achieve an appropriate level of informed decision-making. An example can be already given example on higher premium due to knowledge on earthquake.

The strictest sanction could be the nullity of the contract, i.e. the contract is to be considered void and null from the beginning when it is contrary to compulsory regulations, public policy or fair usage (Law of Contract and Torts, 2020, art. 103). When one considers the explanation of the undue influence on the insured, on one hand, and the duty of the insurer to provide advice on the contract, on the other hand, it is clear that mispersonalization of an insurance contract may be contrary to the law which would lead to nullity of the contract. In the context of mispersonalization in insurance industry, however, this kind of sanction does not play a significant role since it leaves the insured without insurance cover. Consequence of nullity is the duty of each party to restitute the received, but it still doesn't respond to the need of the insured to be covered by an insurance contract. This idea is also in line with the principle that the consequences of nullity should not be more harmful to those they protect that the breach of the legal doctrine (Południak-Gierz & Tereszkiewicz, 2023, 41). The main issue is that, in case of mispersonalization of insurance cover, the insured finds that his insurance cover wasn't an adequate one at the moment of the occurrence of the insured event when he can't conclude the new contract because the risk is not insurable anymore. Only then when there is no possibility of insurance case materializing or when certain risks are not covered despite the will of the insured, the nullity of the contract is an adequate measure that would not deprive the insured of the protection that inspired him to conclude an insurance contract in the first place.

Maintaining the binding effect of the contract is an option mostly in line with the interest of the insured to be protected from certain risks. This could be the case when an insurance contract was rescindable (Law of Contract and Torts, 2020, art. 111). One of reasons for a contract to be rescindable is a shortcoming in terms of intention of the party. Taking into account the aforementioned concept of consumer protection, insured can claim that he was misled about the insurance product (either the premium or the cover) and the offer stemming from the personalization. In that case the mispersonalization would be an example of an unfair commercial practice that led to concluding an insurance contract under the conditions that wouldn't be accepted otherwise. This is a better option from the point of view of the insured since he is entitled to decide whether he remains bound by the contract (Law of Contract and Torts, 2020, art. 112). Another level of protection for the insured is offered by an article 115 of the Law on Contract and Torts, which makes a contracting party at fault for the cause of rescinding (insurer) liable for the loss sustained due to the contract being annulled if the insured wasn't aware or didn't have to be aware of the existence of the cause of rescission.

Finally, the insured is always entitled to request damage compensation stemming from insurance law, tort law, precontractual liability of the insurer. In those cases, contract would still be valid and damage claims would arise, being based on different grounds.

#### 5. CONCLUSION

The main question could be whether the personalization tool is a tool for consumer protection, which would mean that it can't lead to increase of the obligations of the insured. Only the insurer should be bearing the risk of using such a tool and its possible effects of malfunctioning because it was provided for the enhancement of the business in the first place.<sup>22</sup> However, it shouldn't "increase the scope of liability of the business beyond the level that should have been expected when the process of personalization was initiated." (Południak-Gierz & Tereszkiewicz, 2023, 45). Understanding that both the insurer and the insured bear the risk of using the technologies, it would be then pretty questionable in the light of the consumer protection how it would affect the position of the insured since his position can be aggravated during the process of adjustment of the contract's content.<sup>23</sup>

Consumer's protection has been challenged on so many levels that it is just a matter of time when both national and international will have to be amended in order to take all the aspects of new digital environment into account. At the moment when certain changes of legal environment have not been undertaken, common ideas and principles of consumer protection can be applied in the new digital surrounding. Expectations that consumers have when concluding contracts won't be changed in the new technological society. Some new regulatory practices will be developed, but the consumer protection principles will remain the same. All the products and services developed and applied in the new era will maintain confidence in them if the law is adequately implemented or modified if necessary (Howells, 2020, 171). New technological environment does not require the disruption of the actual regime of consumer protection (Twigg-Flesner, 2016, 21-48). Certain changes will be definitely made, but some of the extant rules are either flexible enough or are even completely adjusted. Areas in which the consumer protection values will be completely diminished in favor of gains from digitalization are hardly imaginable and are limited since there is always a range for certain enhancements and alignment of traditional consumer protection values.<sup>24</sup> When it comes to "mainstream" consumer market, transactions in online and offline world do not differ tremendously, which justifies maintaining the same rules and principles. Some of them are and still will be duty disclosure, information duty, fairness of contract content, protecting reasonable expectations, market surveillance, providing remedies.<sup>25</sup> Right to be informed will not be changed and the consumers will still expect to be informed on the service or product acquired. The consumers will still expect to be protected from contractual terms imposing broader duties on them in favor of their contracting party. It is undoubtful that certain novelties will have to be explained, certain

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<sup>&</sup>lt;sup>22</sup> For example, premium is not calculated properly and the result is an underprice of the insurance product.

<sup>&</sup>lt;sup>23</sup> It could clearly happen due to increase of the premiums in the process of the contract's adjustment.

<sup>&</sup>lt;sup>24</sup> Medicine, bio-technology are definately the areas where regulatoion will have to be adapted.

<sup>&</sup>lt;sup>25</sup> The evaluation of the Consumer Rights Directive suggested extending it to digital services contracts, clarifying how it applied to digital content contracts and introducing new transparency requirements for online intermedia, European Commission. (2017a). Report on the application of Directive 2011/83/EU (COM (2017) 259).

concepts to be clarified, but maintaining extant rules that consumers are already familiar with will provide them with confidence to engage in a new digital market. Additional protection of the consumers will always be required because the insurers will always have advantages based on access to the data and the ability to control the algorithms used and better understand the legal rights and obligations (Casey & Niblett, 2017, 1401-1447).

It is also questionable whether it makes sense to change the regulation since the technology develops itself so quickly that the newly adopted regulations become outdated and nonapplicable after just a short period of time. Are we inevitably running towards the "process of legal evolution" (Cozzio, 2019, 624) or is everything already regulated?

#### **LITERATURE**

Albrecher, H. *et al.* 2019. Insurance: models, digitalization, and data science. *European Actuarial Journal*, 9, pp. 349-360;

Alkistis, C. & Chatzara, V. 2020. The internet of things and insurance. In: Marano. P & Kyriaki N., *InsurTech: a legal and regulatory view*. Berlin/Heidelberg: Springer, pp. 49-81;

Baldwin, R. 2016. *The Great Convergence. Information Technology and the New Globalization*. Cambridge, Massachusetts: The Belknap Press of Harvard University Press;

Baranauskas, G. 2021. Application of customisation and personalisation in digital solutions of the non-life insurance market: a case study of Lithuanian, Latvian and Estonian e-sales platforms. *Engineering Management in Production and Service*, 2, pp. 68-82;

Baranauskas, G. & Giedrė Raišienė, A. 2021. Expert-Based Evaluation of Digitalization and Mass Customization in the Baltic Non-Life Insurance Online Platforms. *Journal of Eastern European and Central Asian Research*, 2, pp. 184-201;

Bar-Gill. K. 2019. Algorithmic price discrimination when demand is a function of both references and (Mis)perceptions. *University of Chicago Law Review*, 2(86), pp. 217-254;

Casey, A. & Niblett, A. 2017. The death of rules and standards. *Indiana Law Journal (Bloomington, Indiana)*, 92(4), pp. 1401-1447;

Cohen, J. 2019. Between Truth and Power: The Legal Constructions of Informational Capitalism. Oxford, New York: Oxford University Press

Cozzio, M. 2019. Changes in The Legal Sphere: Rethinking Transparency. *Italian Journal of Public Law*, 2, pp. 624-656;

Eckert, C. & Osterrieder, K. 2020. How digitalization affects insurance companies: overview and use cases of digital technologies. *Zeitschrift für die gesamte Versicherungswissenschaft*, 5, pp. 333-360;

Eggers, P. & Picken, S. & Foss P. 2018. *Good Faith and Insurance Contracts*, Informa Law, New York;

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, pp. 359-396;

Glintić, M., Zaštita prava slabije ugovorne strane u skladu sa Principima evropskog ugovornog prava osiguranja. *Strani pravni život*, 3, pp. 57-73;

Howells, G., 2020. Protecting Consumer Protection Values in the Fourth Industrial Revolution. *Journal of Consumer Policy*, 43, pp. 145-175

Jovičić, K. 2017. Kriterijumi klasifikacije nepoštene poslovne prakse. *Pravo i privreda*, 7-9, pp. 589-600;

Jovičić, K. 2019. Ograničenja slobode ugovaranja – osvrt na potrošačke ugovore. *Pravo i privreda*, 7-9, pp. 437-450;

Kuma, N. & Srivastava, J. D. & Bisht, H., 2019. Artificial Intelligence in Insurance Sector. *Journal of the Gujarat Research Society*, 7 (21), pp. 79-91;

Mantelero, A. & Vaciago, G. 2013. The "Dark Side" of Big Data: Private and Public Interaction in Social Surveillance. *Computer Law Review International*, 1, pp. 161-170;

Mrvić Petrović, N. & Jovanović, S. 2021. Prekršajnopravna zaštita potrošača. *Zaštita kolektivnih interesa potrošača*. Beograd: Pravni fakultet Univerziteta Union, pp. 142-157;

Mullins, M. & Holland, C. P. & Cunneen, M. 2021. Creating ethics guidelines for artificial intelligence and big data analytics customers: The case of the consumer European insurance market. *Patterns*, 2, pp. 1-14;

Pałka, P. & Wiśniewska, K. 2022. Normative Considerations in Data-driven Personalization of Consumer Insurance Contracts. In: Poncibò, C. & Tereszkiewicz P., *European insurance contract law: the promises and perils of digitalization*. New York: Springer International, pp. 1-15 (preprint);

Petrović Tomić, N. 2016. Zaštita potrošača usluga osiguranja: analiza i predlog unapređenja regulatornog okvira. Beograd: Pravni fakultet Univerziteta u Beogradu;

Petrović Tomić, N. 2023. *Osnovi prava osiguranja*. Beograd: Pravni fakultet Univerziteta u Beogradu;

Południak-Gierz, K. 2018. Personalization of Information Duties Challenges for Big Data Approach. *European Review of Private Law*, 3, pp. 297-310;

Południak-Gierz, K. & Tereszkiewicz, P. 2023. Digitalization's Big Promise and Peril: The Personalization of Insurance Contracts and Its Legal Consequences. In: Mathias, K. & Tor, A., *Economic Analysis of Law in European Legal Scholarship*. Cham: Springer, pp. 33-49;

Popović, Lj. & Anišić, Z. & Vranić, T. 2022. An Overview of Digitalization and Personalization in Insurance with a Focus on Life Insurance. *International Conference on Mass Customization and Personalization in Central Europe MCP-CE*, Novi Sad, pp. 124-129;

Powell, D. & Goldman, D. 2021. Disentangling moral hazard and adverse selection in private health insurance. *Journal of Econometrics*, 1, pp. 141–160;

Rose, S. 2013. *Telematics: How Big Data Is Transforming the Auto Insurance Industry*. SAS Institue Inc., pp. 1-9;

Rekettye, G. & Pranjic, G. 2020. Price personalization in the Big Data and GDPR context. *Marketing & Menedzsment*, 3, pp. 5-14;

Siegelman, P. 2004. Adverse Selection in Insurance Market: An Exaggerated Threat. *Yale Law Journal*, 113, pp. 1223-1281;

Stoeckli, E. & Dremel, C. & Uebernickel, F. 2018. Exploring characteristics and transformational capabilities of InsurTech innovations to understand insurance value creation in a digital world. *Electronic markets*, 28, pp. 287-305;

Twigg-Flesner, C. 2016. Disruptive technology-Disrupted law? How the digital revolution affects (contract) law. In: De Franceschi, A., *European contract law and the digital single market*. Cambridge: Intersentia, pp. 21-48;

Venkatesh, S. 2019. Big data – Can it make a big impact in the insurance sector?. *The Journal of Institute of India*, 6, pp. 92-97;

#### **LEGISLATION**

Law on Contract and Torts, "Official Gazette of the Socialist Federal Republic of Yugoslavia", no. 29/78, 39/85, 45/89 – decision of CC and 57/89, "Official Gazette of Federal Republic of Yugoslavia", no. 31/93, "Official Gazette of Serbia and Montenegro", no. 1/2003 – Constitutional Charter, "Official Gazette of the Republic of Serbia", no. 18/2020:

Consumer Protection Law, "Official Gazette of the Republic of Serbia", no. 88/2021:

Directive 2005/29/EC of the European Parliament and of the Council of 11 May 2005 concerning unfair business-to-consumer commercial practices in the internal market and amending Council Directive 84/450/EEC, Directives 97/7/EC, 98/27/EC and 2002/65/EC of the European Parliament and of the Council and Regulation (EC) No 2006/2004 of the European Parliament and of the Council.

#### Др Мирјана ГЛИНТИћ\*

#### УТИЦАЈ ДИГИТАЛИЗАЦИЈЕ НА УГОВОР О ОСИГУРАЊУ И ПРАВА ОСИГУРАНИКА

#### Апстракт

Ауторка анализира правне последице коришћења дигиталних технологија у праву осигурања у контексту заштите положаја осигураника као слабије уговорне стране. Централни део рада посвећен је поступку персонализације, односно могућности понуде уговора о осигурању које у потпуности одговара потребама и профилу осигураника, а подаци о којима су добијени коришћењем управо дигиталних технологија. Међутим, с обзиром да је наведени поступак у супротности са неким од основних начела делатности осигурања, јавља се питање могућности заштите осигурања у случајевима када поступак персонализације није спроведен на адекватан начин и када тако одређена премија и покриће не одговарају потребама осигураника које су га и мотивисале. на закључење уговора о осигурању. Упоредноправна анализа показује да наведено питање још увек није засебно регулисано, што указује да се примењују одредбе прописа о заштити потрошача. Такав је случај и у законодавству Републике Србије, где би се одређени одговори могли пронаћи у Закону о заштити потрошача.

**Кључне речи:** осигурање, персонализација, заштита потрошача, премија, покриће.

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