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DIRECT CLAIMS SETTLEMENT AS AN EXAMPLE OF INNOVATIONS IN MOTOR INSURANCE IN POLAND

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ABSTRACT

The purpose of this paper is the review and general characteristics of innovations observed over the last 20 years in the area of claims handling in the Polish motor insurance market, and to put a special attention to direct claims settlement (DCS).

The study first highlights the importance of innovations for the insurance market, and then discusses various types of innovations related to the area of claims handling. Finally the considerations about the direct claims settlement are described.

KEY WORDS:Direct Claims Settlement, Innovations, Motor insurance

INTRODUCTION

New technologies have entered people's lives and are rapidly changing the world around us. Cars can communicate with drivers and with technical and public infrastructure, similarly intelligent houses and flats that communicate with residents and city infrastructure. By using social networks, applications, the Internet of Things our lifestyle is becoming more and more "connected". This creates opportunities that cannot be left by the insurance sector.

The insurance industry has never been a leader of changes and implemented innovations, rather it has always been conservative, associated with sustainable development, stability and durability as one of the pillars of safety and confidence building. Currently, in the era of the expansion of new technologies, it assimilates and carefully implements innovations at all stages of life of insurance products, but, as in the past, it is not a leader in changes and digitization of the financial sector. As a result, the term InsurTech has emerged, which means a combination of insurance and new technologies as well as modern solutions and is part of a broader trend in the financial sector known as FinTech (Kurek 2018: p. 139).

Innovative technological solutions (InsurTech) should therefore improve the operation of the insurance industry itself. They allow for a better and more effective valuation of insurance risk, personalization of the insurance offer (matching the offered products to the individual characteristics and needs of customers) and the use of more diverse distribution channels. Solutions in this area include: telematics, on-demand insurance and expert systems for underwriting and premium estimations. Among the innovative technologies in insurance, currently, primarily digital technologies are used, such as: Big Data, artificial intelligence, blockchain and the Internet of Things.

Motor insurance is the most important area of activity of non-life insurers in Poland in terms of gross written premium. In 2019 the premium from motor insurance (MPTL and auto-casco) in Poland amounted to over PLN 25 billion (~ EUR 6 billion) and accounted for about 60% of the non-life sector. Taking into account the size and importance of the area of motor insurance, the innovations implemented by insurance companies in this segment of non-life insurance may change the current image of conservative insurers in the eyes of customers.

We can distinguish four basic kinds of innovations in motor insurance in Poland (Manikowski and Owsiński 2020):

1. Products innovations, including: additional services (assistance, legal protection, Direct Claims Settlement – DCS, international loss settlement), telematics for individuals (Usage Based Insurance), telematics for fleets, insurance on demand.
2. Big Data and Pricing Models.
3. Distribution Channels (direct channels).
4. Loss adjustment (DCS, Applications, Chatbots, Interactive Voice Response – IVR, robots/AI/algorithms, anti-fraud models)

The purpose of this paper is the review and general characteristics of innovations observed over the last 20 years in the area of claims handling in the Polish motor insurance market, and to put a special attention to direct claims settlement (DCS).

INNOVATIONS IN CLAIMS HANDLING

Artificial intelligence and advanced machine learning are among 10 strategic technology trends (Accenture 2018). The development of new technologies and the widespread use of smartphones that combine the functions of a mobile phone, computer and multimedia device have created new opportunities that were used to implement innovations at all stages of the claims settlement process, starting from reporting a claim, through its substantive and technical assessment, ending with a decision to pay compensation or a refusal to pay. Currently, most Polish insurance companies that offer motor insurance have their ownapplication for reporting motor claims, some of them use artificial intelligence not only in the technical assessment processes of the claim, but also using robots at the stage of claim reporting. Artificial Intelligence is used in models to detect possibility ofinsurance fraud.

In the field of claims handling, innovations are widely present and do not always have to be associated with the latest technology. An example of a non-technological innovation is the idea of one of the insurance companies to propose to the victim a choice of whether he/she wants a replacement car for a specified period of time or prefers to get a new bicycle forever in the process of handling the claim in the event of damage to the vehicle, which makes further using the car unbelievable (Wysota2018). Many families now own more than one car, and the alternative of getting a bicycle as compensation for downtime due to damage is an interesting solution.

In the claims handling process, applications appeared the fastest on the websites of insurance companies. These solutions were innovative a few years ago. Currently, most insurance companies provide such a possibility of reporting a claim and this functionality has naturally evolved from an innovation to a market standard of customer service in the field of claim reporting via the insurance company's website.

Currently, the use of a smartphone in the claims settlement process is more and more expected, especially by younger generations, brought up in the era of mobile telephony. Each insurance company that offers motor insurance either is still working on its solution or has implemented its own application dedicated to the client, using the client's smartphone or the victim's smartphone in the claim settlement process.Most often, you can report a claim using a smartphone application. Thanks to such an application, the driver is guided step by step so as not to miss any important activities, e.g. documenting the data of the participants of the event and the circumstances of the damage, taking photos of the damaged vehicles and the surroundings, filling out a joint statement on the road incident. The application will suggest, for example, whether it is necessary to call the police, how to correctly take pictures of the damage, what other information must be collected. Some applications, in addition to reporting the damage, allow the customer to participate in the process of technical damage assessment through remote vehicle inspection or the so-called “theitselfclaim settlement”.

Remote vehicle inspection significantly accelerates the claim settlement process in the insurance company. Until a few years ago, the inspection of the damaged vehicle was carried out by an expert at the customer's or in a repair workshop or at the insurance company's unit. It was necessary to arrange an inspection in advance when an expert was available to inspect the vehicle in person. Currently, during a phone call with the victim, the appraiser connects to the camera of the victim's phone and remotely views the damaged vehicle and photographs the damage. In this way, the insurance company quickly receives the information necessary to assess the value of the claim and reduces the time needed to handle it, while the customer does not have to waste time driving to the insurance company and often receives the due compensation much faster.

In claims settlement, insurers are more and more willing to use robots, which, based on advanced formulas and algorithms, using artificial intelligence and machine learning, perform a number of activities in an

automated manner. Such solutions include a virtual assistant who understands the questions asked and the context of the conversation and, very importantly, by using each conversation with the client, it learns by improving the ability to interpret his intentions. Until recently, virtual assistants replaced the IVR (Interactive Voice Response) voice menu, but market reports show that one of the Polish motor insurance price comparison websites on the Internet has implemented a virtual assistant in the insurance price comparison process, and insurance companies are testing the use of a virtual assistant in the claim notification process by phone. In the case of the comparison engine, the service of assessing the amount of insurance premiums for MPTL was introduced as a microservice in the Google Assistant ecosystem. During a conversation with him, the client can compare prices and check whether the offer he has is attractive (CCNEWS 2020).In the case of reporting a claim to the insurance company by phone, a virtual assistant will collect a number of information about the claim and its circumstances, which will speed up the process and relieve traffic on the insurance company's hotline. Artificial intelligence tools for text analysis will help to properly classify documents sent by the client related to the damage.

After the customer reports the damage, the robot creates a loss reserve. The robots browse the Insurance Guarantee Fund's claim databases and supply them with claim data from the insurance company. The use of machine learning allows for quick segmentation of reported claims and directing the customer to the appropriate service path. At the stage of assessing the value of compensation, the use of artificial intelligence to recognize photos of vehicle damage and determine repair costs on their basis is tested. In this way, in the near future, most of the small, simple, frequent damages will be able to be assessed without the involvement of a human, whose role will be mainly reduced to control activities and the possible acceptance of the decision regarding the payment of compensation proposed by the robot.

There are many benefits from implementing innovations in the motor claims settlement process. The customer gains, as he can quickly and easily go through the loss assessment process. An insurance company benefits by accelerating processes and improving their quality. According to a 2018 study by Accenture and PIU, shortening the average service time and guaranteed constant quality of services by eliminating human errors constitute the added value of almost all solutions based on artificial intelligence (Accenture, PIU 2018: pp 58-62).

In this context we should also mentioned about insurance fraud.Insurance Europe points out that insurance fraud is the second most common form of fraud in the world after tax fraud. The nature of insurance fraud is constantly changing as the technology at the disposal of fraudsters develops. In order to increase the effectiveness of detection of insurance frauds, insurance companies also use new technologies, such as artificial intelligence, in their anti-fraud models. The plants do not boast about the mechanisms they use in their models, but by analyzing large amounts of data, one can observe regularities and draw conclusions that can be applied to subsequent events. In this way, artificial intelligence directs selected cases for control, verification or special supervision. After the control is performed by a human, the information about the accuracy of the selected case returns to the artificial intelligence, feeding the learning process and better and better selection of cases for control.

Anti-fraud models also use voice recognition technology. Already at the stage of reporting the claim by phone, the tone and emotion of the person reporting the claim may be the basis for referring the case to the special supervision of experts dealing with insurance fraud in the insurance company. Associating the voice with the scene of the event, circumstances, time or other factors is often decisive in determining the successful detection of an attempted fraud. It must be remembered that all clients pay for the swindled compensation. Therefore, limiting the scale of fraudulent claims may translate into lower premiums for customers in the future.

Innovations are the fastest to be implemented by individual insurers as individual ideas and projects, but they may also apply to general market solutions such as "Direct Claims Settlement" (DCS), which has been formally operating in Poland since April 1, 2015 under an agreement between insurance companies developed under the auspices of PIU.

DIRECT CLAIMS SETTLEMENT

Before DCS was introduced in Poland, the victim, as a rule based on *actiodirecta* principle, reported the claim to the insurance company in which the guilty party had purchased motor third party liability insurance (MTPL) and it was this insurance company that dealt with the claim settlement (see fig. 1). The introduction of DCS significantly broadened the possibilities of the victims. Under DCS, the victim can choose whether he wants the claim

to be settled by "his" insurance company, in which he took out the MPTL policy (see fig. 2), or by the insurance company of the perpetrator of the loss. This is a very big change on the entire motor insurance market in Poland, thanks to which the companies will be very interested in the proper handling of the victim, because it is their own client, and not "someone from outside" as before.

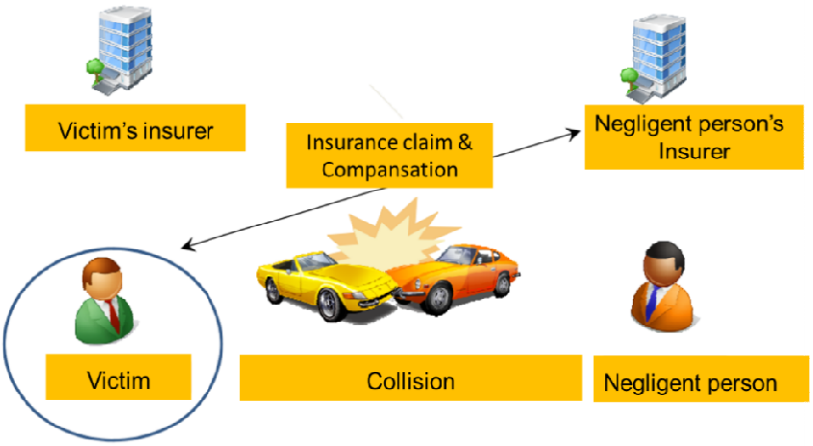

Fig.1 Traditional claims settlement – without DCS
Source: PIU, 2016

DCS has been operating in Europe for dozen years. Depending on the country, it was introduced at different times, e.g. in France, DCS has been in force since 1968 (in its present shape since 2003), in Belgium since 1972, in Italy since 1978 (in its present shape since 2007), in Spain since 1982, and in Greece since 2000. Therefore, it is not a new solution, but its implementation permanently changes the possibilities of pursuing claims from the third party liability insurance of the motor insurance market.

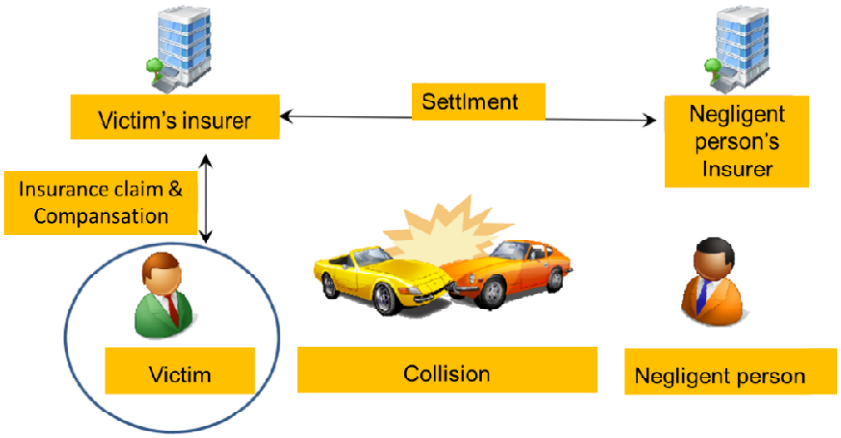

Fig.2 Claims settlement with DCS
Source: PIU, 2016

The introduction of DCS in Poland was not easy. The Polish Chamber of Insurance (PIU) has been carrying out conceptual work since 2008. In 2013, PIU decided to launch the DCS pilot, but ultimately the pilot was not introduced. Then the initiative was taken over by PZU and on April 4, 2014, it launched DCS on its own. This innovative solution for the Polish market has become available to Polish drivers. PZU was followed by other insurers and a year later, on April 1, 2015, five insurance companies joined DCS under the agreement of insurance companies developed under the auspices of PIU: Concordia Ubezpieczenia, Ergo Hestia, PZU, Uniqa and Warta. Aviva and Liberty Ubezpieczenia joined on July 1, 2015, and Gothaer (now Wiener) joined on October 15. In total, in 2015 insurance companies that joined DCS covered two thirds of the Polish motor third party liability insurance market in terms of premium. On April 1, 2016, AXA joined DCS. Currently, 8 companies operate within the system (after the merger of Liberty Ubezpieczenia with AXA Ubezpieczenia).

As part of DCS, you can settle a loss that took place in Poland and only between cars registered in Poland, so all damages that happened to Polish drivers abroad are not covered by this system. There is also a quota limit of PLN 30,000 (over 7000 EUR), personal injury and events between more than two vehicles are excluded (see fig. 3). DCS therefore covers the most common minor damage (Bagińska 2015: pp. 54-55).

Conditions	Limitations (No DSC)
Damages involving cars only	Personal injury
Damages in Poland	Traffic incidents involving more than 2 cars
Damages up to 30,000 PLN (~7000 EUR)	Damages over 30,000 PLN (~7000 EUR)
Both vehicles involved in the incident must be registered in Poland	If the case goes to court

Fig. 3. DCS – conditions and limitations
Source: own study

Settlements between insurers are made by paying a lump sum or costs actually incurred, depending on the amount of compensation paid. The system of settlements between insurers was designed in such a way that insurers should not be interested in payment of reduced or inflated compensations (to "own" client). It is based on the drawing of the value of „i", on which the lump sum threshold (arithmetic average compensation) for a given accounting period depends, which is to prevent coordination of the calculation of compensation (in plus or in minus) between insurers. No insurer will be able to predict the amount to be refunded, in particular, whether it will be higher or lower than the actual compensation paid in a given case. The draw is therefore intended to reduce the risk of a conflict of interest.

The system is supported by DCS Application - a computer program, which manages mutual settlements between parties of DCS.This tool is mainly used to determine the amount of lump sums,which in principle form the basis of the billing system, however full recovery of paid compensation is also possible.All eight insurers being parties to the DCS contract use this application. 163,078 claims were settled in the system, by the end of 2018.

CONCLUSIONS

The solutions presented in the paper do not fulfill all the innovations used in motor insurance, even in claims handling. They constitute only a fragment, but due to the volume limitations of the article, it was impossible to discuss them in more detail. However, we should be aware that the future of motor insurance is inextricably linked to further innovations.

Until 2015motor third party liability insurance was relevant only to victimof an accident. MTPL was treated almost as a tax - obligatory and irrelevant for the buyer. Therefore, customers usually chose the cheapest third party liability insurance to meet the statutory obligation.DCS adds a new meaning - currently, the buyer of MTPL will use his own policy and insurer when another driver causes damage.Clients will pay attention to the quality of claims settlement under MTPL insurance, and the low price of the policy will lose its importance in favor of the insurer's quality of service.

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