
The Center of Digitalization in Turkish Insurance Sector: Insurance Information and Monitoring Center- Covid-19

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Abstract: In the digital age we live in, dizzying developments are taking place with the triggering of the Covid-19 process. The change and transformation experienced in information systems and technological applications change the daily behavior of individuals, societies and countries. As in all financial service sectors, digital applications are developed in the insurance to respond to these changes in behavior, and insurance product demands are met quickly and easily through these applications. Insurance Information and Monitoring Center (IIMC) is essentially a data center that collects policy and claim data from insurance companies and serves the insurance sector. IIMC has an exemplary structure among information centers in the world insurance industry. Its function and importance has been understood more in the process of Covid-19 in the world. It provides very important services for the public authority, insurance companies, policyholders, experts, agents, actuaries and other relevant public holders. In the study, the legal infrastructure of IIMC, the benefits it provides to all relevant parties in the sector, the digital insurance products it has developed and its future position are mentioned. Moreover with the current pandemic process, by revealing its structure that sets an example for the world insurance sector, various suggestions are made in order to be modeled, to reach the ideal institutional structure and to increase its efficiency.

Keywords: Insurance Information and Monitoring Center, Covid-19, Insurance Sector, Digital Applications, Insurance Products.

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Türk Sigortacılık Sektöründe Dijitalleşmenin Merkezi: Sigorta Bilgi ve Gözetim Merkezi-Covid-19

Öz: Yaşadığımız dijital çağda Covid-19 sürecinin tetiklemesiyle birlikte baş döndürücü gelişmeler yaşanmaktadır. Bilişim sistemleri ve teknolojik uygulamalarda yaşanan değişim ve dönüşüm bireylerin, toplumların ve ülkelerin günlük davranış biçimlerini değiştirmektedir. Tüm finansal hizmet sektörlerinde olduğu gibi, sigortacılık sektöründe de söz konusu davranış değişikliklerine cevap verecek şekilde dijital uygulamalar geliştirilmekte ve sigorta ürün talepleri bu uygulamalar aracılığıyla hızlı ve kolay bir şekilde karşılanmaktadır. Sigorta Bilgi ve Gözetim Merkezi (SBGM) esas olarak, sigorta şirketlerinden poliçe ve hasar verilerini toplayan ve sigorta piyasasına hizmet veren bir veri merkezidir. SBGM dünya sigortacılık sektöründe bilgi merkezleri arasında örnek bir yapıya sahiptir. Dünyada yaşanan Covid-19 sürecinde merkezin işlevi ve önemi daha çok anlaşılmıştır. IIMC, kamu otoritesi, sigorta şirketleri, sigortalılar, eksperler, acenteler, aktüerler ve diğer ilgili kamu paydaşlarına yönelik çok önemli hizmetler sunmaktadır. Çalışmada SBGM'nin hukuki altyapısı, sektördeki ilgili tüm taraflara sağladığı faydalar, geliştirdiği dijital sigorta ürünleri ve gelecekte olmayı hedeflediği konuma değinilmiştir. Bununla birlikte mevcut pandemi süreciyle birlikte dünya sigortacılık piyasasına örnek teşkil eden yapısı ortaya konarak model alınması, ideal kurum yapısına kavuşması ve etkinliğinin artması için çeşitli önerilerde bulunmaktadır.

Anahtar Kelimeler: Sigorta Bilgi ve Gözetim Merkezi, Covid-19, Sigortacılık Sektörü, Dijital Uygulamalar, Sigorta Ürünleri.

Introduction

Developments in information and communication technologies have brought important changes in the field of insurance, as in every field. With the information systems, collecting, storing and processing information related to insurance has become important and today digital technology has become indispensable for many companies. As a fact, companies find the opportunity to sell a wide range of products and thus have a new customer portfolio. Consumers, on the other hand, can perform their transactions faster and easily and find the most suitable insurance products for them, especially by comparing prices. Thus, the speed of mutual interaction increases and all parties benefit from information technologies to the max extent. Covid-19 experienced in the world has increased the speed of electronic interaction and the use of digital technology. As a result, with the internet and technological innovations, the importance and share of the service sector increases and the premium production of the insurance sector rises and its share from the national income rises as well.

Digitalization, in which information technologies are used in all aspects, in its simplest form, is used in the internet, mobile, etc. by developing electronic software. Beyond, it is the intense use of technology through applications. Furthermore, it can be named as technological developments including customer interaction and respond to all kinds of requests of the insured within the scope of the products requested (PWC, 2016).

With the innovations in the digital world, the service industry has developed rapidly and has directly and indirectly affected many institutions operating in the field of insurance, such as insurance companies, insurance intermediaries, professional organizations engaged in insurance activities, and regulatory authorities. Insurers and insureds take advantage of these practices when sectoring their products and purchasing new policies. Insurance customers do research on the internet before purchasing any insurance product, and compare insurance prices, then determine the most suitable product for them by analyzing benefits and costs, and finally buy insurance policies (Pozzi, 2015). As can be expected, there is big increase in the volume of these transactions after Covid-19. As a fact, approximately 26% of the insured worldwide buy their insurance policies via mobile devices or the internet (PWC, 2016). Therefore insurance companies are very conscious about using digital devices (Kubilay and Kubilay, 2013).

The Covid-19 process has been effective in the insurance industry and has accelerated the shift of policy and claim processes to digital environments by insurance companies. In this period, the insurance sector has shown a successful performance, especially in carrying out claims processes without interruption. On the other hand, internet selling on-line insurance coverage came to the fore during this period, and the number of insured people who wanted to directly purchase their insurance policies increased. However, the increase in direct sales was limited due to the fact that the existing internet

selling did not have the desired level of flexibility in product scope, risk and coverage selection.

Considering the technological change and digital transformation, public authorities constantly update their legislation and keep up with the dynamism of the sector. However, the digital transformation speed of every country and company in insurance sector is not the same as expected. Likewise, consumers do not benefit from technology at the same rate. Therefore, it is essential that developing countries examine the examples of developed countries, and insurance companies imitate companies that use the technology to the max extent and thus develop their digital infrastructure by making new investments. However, should be noted that covid-19 has increased and continues to increase the speed of digital transformation in terms of both institutions and citizens.

Taking into account all of these issues and the current pandemic process, insurance companies make huge investments in the establishment of digital environments and their costs are increasing accordingly. Considering the independent investments made by each company in these applications, the cost to be incurred in the sector will be quite high. As a solution to the problem in our country, Traffic Insurance Information Center (Tramer) was established in 2003 by the public authority (Traffic Insurance Information Center Regulation, 2003). Tramer, which is a data and technology center, has expanded its scope and capacity by including the transmission of data of some insurance branches and its name was changed to Insurance Information Center (SBM) in 2008 (Insurance Information

Center Regulation, 2008). Finally, with the regulation amendment made in 2011, surveillance function was added by the public authority and its title became Insurance Information and Monitoring Center (IIMC) (Insurance Information and Monitoring Center Regulation, 2011).

IIMC was founded under Turkish Insurance Association as an institution with legal personality, located in Istanbul. However, no public financial resources were used and established as a public-private partnership financed entirely by the participation fee of member companies. In our country, it operates as a data center responsible for keeping, storing and processing information on insureds within the scope of insurance law. The transmission of data collected in insurance companies to IIMC in terms of certain insurance branches is required according to the insurance legislation. Processing and transforming the data obtained from the insurance and making it ready for the use of insurance companies are among the duties of IIMC.

In the IIMC, sub-units such were established as Haymer, where life insurances information are kept, Sagmer, where health insurances information are recorded, Hatmer as a damage tracking center, and Siseb, where insurance errors and frauds are recorded. IIMC is essentially a data center that collects policy and claim data from insurance companies and serves the sector again. Moreover, the policy production and claim data are kept at the IIMC as a digital center of the insurance sector, especially in those insurance branches such as third party liability and collision insurance which are most prevalent

in Turkey, and life, health, fire, earthquake, travel health, green card, medical malpractice, hazardous substances and wastes insurance (Insurance Information and Monitoring Center, 2019).

In a single center such as IIMC, collecting and using the data obtained from insurance sector, instead of establishing the information systems of each company, and then making it ready for the use of all insurance companies gives the sector a great advantage in terms of benefit and cost. IIMC is an example model for other countries established in the field of insurance, taking into account country-specific conditions. As a result of the research conducted in the insurance sectors of developed countries, no example of IIMC is encountered and included as an exemplary practice with its own corporate structure worldwide (Hakseven, Insurance Information and Monitoring Center, 2019).

In the study, it is revealed that instead of establishing the digital systems of each insurance company in the digital age we live in, the execution of the transactions through a single structure such as IIMC which is established by law having a legal personality, is an exemplary model worldwide and provides a great advantage to the sector. In the Covid-19 time, the function and importance of IIMC has increased more and what can be done due to the pandemic has been discussed. Furthermore, the legislation and institutional infrastructure of IIMC designed as a model, the products it offers, the advantages it brings to the holders of the sector and the issues that it should undertake in the future are mentioned. In addition, suggestions

have been made for IIMC to have an ideal structure and to become more useful for the insurance sector, taking into account the Covid-19 process.

Legal Framework of IIMC

The legal structure of IIMC was first made by the Traffic Insurance Information Center (Tramer) Regulation issued in 2003 (Gençosmanğlu, 2006). The legal infrastructure of Tramer, which was established as the center where only policy and claim data related to traffic insurances are collected, was strengthened in 2007 with the Insurance Law No. 5684. As a fact, article 31 / B of the Law contains regulations regarding the Insurance Information and Monitoring Center. Within the framework of the first paragraph of the article of law, by Turkey Insurance Association (TIA), in relation to the beneficiaries of the insured and the insurance contract, false, including insurance practices, to collect essential information on risk assessment and the information of insurance, in reinsurance and insurance activities pension companies related to public authority, it is envisaged that an Insurance Information and Monitoring Center will be established as an information and technology center in order to share it with designated individuals (Insurance Law Article 31 / B, 2007). The center, whose legislative infrastructure was strengthened with the legal arrangement in 2007, was assigned to collect and share information from the relevant persons under certain conditions.

In order to carry out all kinds of administrative and operational works and transactions related to sharing, collecting and processing insurance data, a management committee has

been established within its own structure and responsibility has been attributed to the committee. The committee consists of senior executives of insurance companies and representatives of public authorities. It is necessary that the expenses incurred due to its activities will be covered from its own budget, its revenues will be comprised of the participation shares of member companies, and will be audited by the public authority responsible for insurance. It is stated that all transactions and records will be confidential, but if the information owner has consented, these records can be shared with the relevant parties for a certain fee (Insurance Law Article 31 / B, 2007).

In addition, all procedures and principles regulated by a regulation regarding the establishment of IIMC, activities, the scope, content, form and sharing of the information in the center, pricing, determination of participation shares, insurances including coverage, duties and responsibilities of the management committee, personnel structure, duties, and structure of sub-information centers (Regulation On Insurance Information And Monitoring Center, 2008).

For his reason, the legal framework of IIMC has been strengthened by the Law, and besides its working procedures and principles have been regulated by an exclusive regulation. No public resources are used in any way and are financed by insurance companies, which are members, in the form of participation shares. Having a strong legislative infrastructure, IIMC has a unique institution that collects and shares information from public authorities, insurance and reinsurance companies, agencies, brokers, experts, actuaries and all relevant insurance

institutions, and is also organized as a data and technology center and established with a public-private partnership.

The Importance and Benefits of IIMC for Insurance Sector

IIMC is an important technology institution tasked with providing digital services to all relevant holders operating in the insurance sector. Furthermore it plays an active role and has a guiding function in all digital environments in the insurance. One of its primary tasks is to make sense of the raw data produced as a result of the activities of the sector and make it available to the sector again (Uğur and Akdemir, 2011). This raw data can become usable if it has a holistic structure, processed and interpreted, and then IIMC basically undertakes this task.

IIMC to the stage reached in insurance activities in Turkey represents much more than a central data store. As a matter of fact, in addition to collecting and presenting the data of institutions and insured persons operating in the insurance sector, it also operates in order to produce statistics by processing the data in the right context, to make the pricing process in insurance as efficient as possible and to prevent insurance frauds and develops technologies and digital applications related to these issues (Insurance Information and Monitoring Center, 2020). It has joint projects and integration not only with sector but also with other public institutions and organizations. It realizes data integration with the mentioned institutions and organizations completely through its own infrastructure (Hakseven, 2019).

Benefits for Insurance Companies: Collecting all policy and claim data for companies in a single center provides great convenience in terms of using the data. In addition, obtaining data of all companies from a single center provides a significant cost advantage in terms of designing policies and tracking claims. Otherwise, having to create their own information and technological infrastructures and make investments will reduce the capital of companies.

The basis of underwriting activities of insurance companies is composed of actuarial information specific to person along with policy and claim data. Collecting, processing and making the information ready for use in IIMC by years will ensure a fairer and more accurate insurance pricing in the premium calculations of companies. Thus, it will create ease of calculation and cost advantage for the companies.

Moreover, it provides an important convenience to insurance companies in the fight against insurance fraud, which is the sensitive part of the entire world insurance sectors. IIMC actively conducts its activities within the scope of the regulation issued by the public authority to fight fraud (Regulation On Detection Notification and Recording Of Wrongful Insurance Practices And Principles And Procedures For Fighting Against These Practices, 2011). The “Insurance Fraud Prevention Bureau”, established within IIMC, provides a great benefit to companies in terms of supporting the fight against fraud and preventing their financial losses, and fulfills a very important task, especially in the prevention of individual and organized fraud (Yıldırım, 2013).

Benefits for Insureds: IIMC provides common services to all insureds, enabling them to receive effective, fast and efficient service through its digital environment. The insured have real-time access to information such as making price comparisons and obtaining offers, accessing policy and claim information, querying accident reports in third party liability insurance. They also have the opportunity to access statistical information and basic reports regarding the insurances within IIMC.

Benefits for Agents / Experts / Actuaries: IIMC provides an important role in terms of providing services to intermediaries. Experts create their reports on digital platforms offered by IIMC, agencies carry out their intermediation and policy activities in compulsory insurances and some voluntary insurances in the country, and actuarial reports and tariffs are also uploaded to IIMC. Ultimately, the data are made available to insurance companies, the insureds and the public authority.

Benefits for Public Authority: It basically fulfills the supervision and control function for the authority. Because IIMC makes sense of the data it provides and makes it ready for the use of the authority and then can determine the course of the sector by using the data there. In addition, the public authority makes the reporting on the data of the insurance sector through the center. While creating the insurance legislation, which is its main task, it makes use of these reporting and receives instant data about the current situation of the sector. This situation plays a very important role in terms of dynamics of the sector or taking action when problems arise. Furthermore, it has the opportunity to analyze by obtaining all kinds of data or

information it needs from the center. Therefore, there is no need for the public authority to establish information systems or digital environments exclusively.

Another important function for the authority is to record the insured information in IIMC. It carries out an important function in the detection of uninsurance by cooperating with other relevant public authority where vehicle license information is recorded. It also plays a major role in establishing and increasing the trust of the current insured in the system by determining the uninsured who are not registered, thus reducing the rate of uninsurance in the sector.

Consequently, IIMC provides important services and helps insurance companies, insureds, intermediaries, experts, actuaries and public authorities with digital and technology applications in order to ensure more efficient operation of the sector. A good example is the "mobile accident report application", which can be seen more tangibly for all parties. Because in the event of a traffic accident, the accident report can be prepared very easily and quickly with the application in the smartphone and uploaded to the IIMC system. The insurance company, which displays the mobile accident report record at IIMC, can contact the insured immediately after the accident and provide assistance if necessary. Subsequently, the expert report is prepared and uploaded to the system again, and made available to the parties. The public authority, on the other hand, can instantly access and follow up information regarding the concrete event, if requested. With this application, the transactions of the insured regarding the accident occurred are com-

pleted in a short time and the grievances that occur after the accident are quickly eliminated. The transactions in question only take a number of days to complete. Otherwise, it may take weeks to be finalized.

As seen, IIMC, which creates and continues to create value-added services by converting data into information, is indispensable and vital in terms of the advantages it brings to all parties operating in the sector.

Products and Services Offered By IIMC to Insurance Sector

IIMC, in addition to serving all institutions and companies within the insurance sector, provides a source of information for analysis, surveillance and supervision to the public authority. As, it contains an important structure that faces the public on one side and the sector organizations on the other. Ensuring coordination between the insurance sector and IIMC in order to provide digital services in the most efficient way possible in line with its goals is strategically important (Hakseven, 2019). The products offered play a fundamental role in ensuring this coordination. The main strategic digital products created and continued to be developed in the context of the services provided by IIMC to the sector are given below.

Policy and Claim Data

The most important data collected in IIMC and shared with insurance companies are policy and claim data. With the platform created in IIMC, insurance companies can easily access the data and provide great benefits both in establishing policy prices and managing the indemnities payable.

Self Service Reporting

It is a platform that allows insurance companies, Turkish Insurance Association and authorized persons working in the public authority to create their own reports with user-friendly new interfaces and to make analyzes in the detail they want (Hakseven, 2019). Therefore, flexible reporting was provided in line with the needs of users.

Data Maturity Project

Within the scope of the project initiated in 2017, it is aimed to increase the quality of data transferred to IIMC by insurers and to reduce the data reconciliation burden on them by automating process carried out by the notification procedure. With the realization of the data maturity project, it is aimed to score the completeness, timely delivery, accuracy and consistency items of the data transferred to IIMC by insurers and to publish the company scorecards created according to these scores regularly on the IIMC business intelligence portal (TIA General Activity Report, 2018).

With the project, it is mainly aimed to increase the quality of data exchange between the insurance sector and IIMC. In areas such as government-supported commercial insurance, joint recourse platform, a joint MPLS (Multi Protocol Label Switching) cloud was created between insurance companies and IIMC as a part of the project in question and was offered to the service of the sector. With this newly developed project, safe and closed circuit connection lines were established with insurance companies over the MPLS cloud. Thanks to this connec-

tion cloud specially established for insurance companies, IIMC services are planned to be made healthier and faster. As a result, an important project will be realized in accordance with Turkish Personal Data Protection Law (Hakseven, 2018).

Common Data Model Project

The first product transitions of the model, which was initiated in the last quarter of 2017 in order to ensure the security of insurance data, collection of standards in a single model, reduce application development costs for both IIMC and companies, and increase sustainability in all systems, have been completed as of the current situation (Hakseven, 2019).

As a result of the project, "Insured Score" will be calculated for each insured by transferring all insurance policy data to IIMC. In achieving this score, it was aimed to create a healthier score infrastructure by using data from other institutions as well as insurance data. In addition to the total score to be calculated on the basis of insured, branch and object-based score calculations such as fire, motor own damage, health insurance will also be made. In the object-based score calculation, the score for the objects will be calculated over all the insurance data (such as vehicle and house) apart from the insured (BEST Yayıncılık, 2019).

Mobile Accident Report Application

With the mobile accident report application, developed in October 2014, a system was developed in which the reports can be filled in as short as 5 minutes by taking photos and videos of the accident through the application and verbally describ-

ing the accident, without the need for a report, pen or paper (SigortamNet, 2015).

The mobile accident report application, which has no other example in the world, is an application produced entirely with IIMC resources. Keeping the old-style paper report version takes a few hours, causing traffic congestion and loss of time depending on the scene of the accident. In addition, the process kept in the paper environment results in many stages, and the average completion time can take 15 days due to the processes such as communicating to companies, fault detection and notification to the parties and so on. However, in the mobile accident report application, this period is reduced to 2 days (Insurance Information and Monitoring Center, 2020). Even in some accident situations, there may be reports that result before the vehicles leave the accident site.

S-Cloud Project

Cloud computing is one of the versatile and rapidly developing service tools that provide the convenience of accessing information on the internet from anywhere without any space limit (Henkoğlu and Külcü, 2013). This project, a product of Insurtech, was created to include many solution services such as agency and expert applications, reporting and analytical solutions, insured information applications, secure data transfer, location-based services. It has been developed as an infrastructure where desirable sector holders can benefit from these digital solutions safely and with high performance through cloud computing with the logic of "as a service", access and sharing opportunities (Insurance Information and Monitor-

ing Center, 2019). Thanks to the use of cloud applications with the project in question, information technology standards will help to reach a certain level for insurance applications, especially agency applications, and will reduce application development costs in the long term.

e-Insurance Policy Project

With the project, it is aimed to send the policy forms prepared with paper printouts and hand signatures to the consumer electronically via SMS, mobile and e-mail tools. In addition, it is aimed to ensure that consumers can access insurance policy forms through many different channels such as "IIMC mobile, Sigortam360.com and e-Devlet" (Insurance Information And Monitoring Center, 2019). With the implementation of the e-Insurance Policy Project, it will be possible to reduce the use of paper, reduce transaction costs and, according to the relevant legislation, the difficulty of physical storage within a period of 10-15 years and reduce the risks to a minimum.

Covid-19 and Insurance Information and Monitoring Center

As of 11/03/2020, after Covid-19 was declared as a pandemic disease due to the alarming spread in the world by the World Health Organization, both the private and the public sector switched to the remote working method. Especially in all financial sectors, including insurance, the number of employees in workplaces has been reduced to a minimum, enabling them to work from home or remotely and digital platforms have been established in this direction. This situation, in Turkey, contributes to the fact that many companies move their information

systems and applications to cloud technology, thus ensuring full integration with IIMC. Because, with the increase in the number of people working remotely, cloud systems may offer more bandwidth and capacity, depending on whether the company employees access internal servers remotely or not. In fact, this situation creates a great opportunity for both companies and IIMC.

In line with the digital system applications of other financial institutions, insurance companies can realize digital transformation at a lower cost and in a shorter time so that they can become much faster, responsive and affiliated organizations with IIMC. Because such situations are a challenging for individuals, families, society and all economies, and cause them to keep up with the digital world. However, by examining digital applications in other sectors, it is possible for them to acquire and develop the latest technology at a lower cost.

As a result of the serious investments made by IIMC in the field of information systems technology in recent years, Covid-19 has continued the work of the Center at the same pace. Because no problems were experienced by the insurance sector in accessing IIMC digitally. Therefore, it is an important success that IIMC continues the activities as a technology institution and serves the sector while institutions operating in many sectors are taking a break or experiencing problems due to the pandemic situation.

On the other hand, in countries such as England, France and the Netherlands, the direct sales method of policies through the internet is widely used

(<https://www.insuranceeurope.eu/insurance-distribution>).

With the pandemic period, people make their shopping mostly through online platforms. These behaviors have become common. In other words, people somehow got used to online shopping with the Covid-19.

As a fact, many companies have established online systems and started to make their sales through technology. It is predicted that people who are used to online systems during the pandemic period will continue afterwards.

Therefore, it is possible to meet the demands of people for insurance products in a much shorter time and at low cost. And then they will be able to easily sell insurance products through the platforms established by insurance companies on their official websites. However, each company establishing separate technological and information systems will be costly and waste of time for both companies and insureds. In this respect, with the structure to be established in IIMC, it is not necessary to establish a separate structure for each company, besides insureds will not have to examine individual insurance company websites and products.

Insurance companies will provide great convenience and cost advantage in purchasing insurance products for citizens by uploading their tariffs and coverages to the platform established in IIMC. Because, in the traditional method, when insurance companies want to sell policies through an agency, agency then has a commission income from its intermediary activity. The commission is between 10-20% on average, although it may vary according to insurance product branches. In

the direct sales method, companies will not bear the cost of such an intermediary commission and will sell policies at a cheaper price. Both companies and citizens will benefit from this situation as a result.

However, the system to be installed in IIMC should be flexible. In other words, while companies upload their tariffs and coverages one by one, people should be allowed to purchase the insurance products they want at the sub-range of coverage they wish. For example, when a person wants to purchase collision insurance for his vehicle, a flexible structure should be established that will allow him to add voluntary financial liability (VFL) cover and determine the VFL limit himself when necessary. Thus, the insured will have a structure that can easily select the product they wish and compare the prices of all companies on a single platform. In other words, people will shape the policy and its content themselves. This result will provide a great opportunity in terms of cost advantage, faster time to purchase insurance and new product development opportunities depending on demand.

The Future Of IIMC And Recommendations

IIMC has short, medium and long term goals. In the short term, it is planned to complete the projects that are already implemented or developed and to move on to the next phases. In the medium and long term, it has the goal of becoming a technology center where the data in all insurance branches originating from the sector are collected in real time and where technological solutions are produced in common use for the sector and lastly are offered to the service of both holders in

the sector and citizens (Insurance Information and Monitoring Center Website, 2020).

Thus, providing reliable, meaningful information and statistics for the sector to make reasonable pricing in a secure data set, increasing the trust in the insurance system by preventing abuses, and helping to activate public surveillance-supervision are the main goals of IIMC in the future. It is important to have a structure in this context. In order for IIMC to have an ideal structure in the current situation, it is important to take the necessary actions to implement the following recommendations.

1. Achieving a Risk Center Like in the Banking System:

The Risk Center, brought with the amendment made in the Banking Law in 2011, was established as a center that requires credit institutions in the banking sector and financial institutions approved by the Banking Regulation and Supervision Board (BRSB) to collect the risk information of customers and share this information with real persons or legal entities if they are approved together with banks (Risk Center, 2020). The center found under the Bank Association of Turkey (BAT) began operations in 2013.

The members of the center are obliged to give all kinds of information about the customer requested by the center. Otherwise the center have the authority to stop the exchange of information as a sanction for those who do not comply. In addition, it is very well known in the financial sector. It has the opportunity to detect problems occurring in credit institutions or banking and to offer early warning in the context of the infor-

mation it provides to institutions. The task of the Risk Center is to keep records of member financial institutions (banks, leasing, factoring, asset management companies, financing companies) information such as credit risk, protested bills, bounced checks, credit limit, receivables to be liquidated and, when required, third parties within the scope of the legislation. to share with people (Finanspedia, 2020). BAT puts this information into a report and makes it available to those concerned by a fee.

Similar to Risk Center in banking sector, it can be increased awareness and effectiveness by strengthening legal infrastructure and setup of IIMC. In addition, a structure can be made with IIMC to provide early warning to insurance companies in particular and to the sector in general by detecting risks in advance. In addition, by evaluating the information of each insured and making customer risk analysis, it can create a risk score and share it with relevant holders. For this reason, apart from producing and presenting useful information to the insurance sector, SBGM will provide great benefits to the sector, determining systemic risks that an individual insurance company and public authority will have difficulty in determining and providing the opportunity to take precautions in advance.

2. Digital Identity and Blockchain: Digital identity is the electronic version of the application that we introduce and verify ourselves with physical cards in real life (Camp, 2004). It is essential to apply the digital identity application in in the insurance sector already applied in many fields such as technology, finance, education and communication. The best application of digital identity in our country is the e-Government

project. Among the advantages of digital identity application are fast and easy data confidentiality and security, lack of need for physical archive, increase in insurance penetration, decrease in insurance premiums, new product design, detection of insurance fraud, facilitation and follow-up of claim settlement processes, activation of insurance distribution channels, storage of personal data etc. (Turkey Informatics Foundation, 2019).

Blockchain is a distributed ledger technology where data is cryptographically linked and recorded (Nakamoto, 2008). In its simplest form, the data is kept in different points and recorded (Byström, 2016). When the block chain technology and its innovations are expected to be taken into consideration benefits play an important role in the development of secure digital identity management system (Turkey Informatics Foundation, 2019).

In this context, instead of applying the digital identity application by insurance companies one by one, using the blockchain technology, which has become popular in the world with its secure data network and distributed structure, it will be of great benefit to be managed and implemented from a single center such as IIMC. Above all, it will provide cost advantage. Therefore, considering that blockchain technology and digital identity application will have a more widespread use in the near future, it is thought that it would be appropriate to initiate a project in this direction by IIMC and to start work immediately.

3. Full Integration of Claims Data: One of the most important problems in the insurance sector is the lack of com-

pleteness and accuracy of claims data in motor vehicle insurances. The public authority must require insurance companies to deliver the requested information on claim and other issues in a timely, complete and accurate manner, and then review the sanctions for them. The current sanctions in legislation cannot be said to be a deterrent in this regard. Lack of data is also a result of inadequate sanctions. Therefore, it is important that all data are included in the Center completely by ensuring the integration between insurance companies and IIMC on damage data. Because the determination of the correct premium, the obtaining of real information about the vehicle in the inquiries made by the insured in the purchase of second hand vehicles, etc. this project needs to be implemented and completed as soon as possible.

4. Simultaneous Submission of Financial Data to Public Authorities: IIMC should be able to obtain accounts that the supervisor deems appropriate simultaneously from the financial statements of insurance companies and submit them to the authority's supervision and monitoring on a solo and consolidated basis. System improvements are essential in this direction. This is because efficiency in the monitoring function of the authority will increase, on-site supervision needs will be minimized, and finally the supervision burden on insurance companies will be reduced.

5. Transferring Insurance Data in Other Branches to IIMC: Although IIMC still receives compulsory liability insurances as well as own damage, health, personal accident and life insurance data from insurance companies, it does not receive

any data from insurance companies in branches such as fire and natural disasters, non-compulsory liability insurance, general damages and transportation. IIMC should be transformed into a structure where all policy and damage data are obtained from the companies in all branches and insurance types included in life and non-life main groups. In the end, it should be made the main data warehouse and backup center of the insurance sector in our country.

6. Data Exchange with Other Holders in Preventing Uninsurance: IIMC has a structure that can play an important role in determining those who do not have compulsory insurance and increasing insureds rate. It has a function to determine the ones who did not have insurance particularly for those who did not have third party liability insurance by comparing the information of the vehicle owners (for example, the last four digits of the license plate or chassis number, ID or tax-ID) and the policy information to be obtained from the database of the General Directorate of Police (GDP). IIMC sends SMS, e-mails, etc. to vehicle owners who are not insured, and send the same information to the GDP, enabling it to take action on persons who do not have insurance. In this way, an insurance rate close to 100% can be achieved in compulsory liability insurances.

Conclusion

IIMC, which was established in 2003 and sets an example for the global insurance markets, has been structured as a data and technology center. With its nearly 17 years of experience, IIMC, which is indispensable for the sector, provides services and benefits to many stakeholders such as public authori-

ties, insurance companies, insurance holders, intermediaries, actuaries and experts with its digital applications. With the products and projects it develops, it continues to be the digital center of the Turkish insurance market and exhibits an exemplary digital corporate structure for all other markets.

Technology-oriented and developing digital applications, IIMC is a dynamic and active institution working to offer new products to the insurance sector. However, it is important that IIMC should work in a sector-oriented manner while acting within the framework of its goals and objectives. In other words, it should carry out its activities in a way that directly provides services to insurance companies and insureds and spend its resources in this direction. Although understood from the mentioned projects that the center proceeds in this direction, it is necessary to produce digital solutions and provide services to functions such as claim settlement and compensation payments, which are traditionally carried out by the sector already. Because the compensation payment periods in the sector take a long time and grievances may arise for the insured.

Establishing digital infrastructure in the insurance sector can be quite costly for each company. Instead of establishing the infrastructure in question for each company in the Turkish insurance sector, creating information systems in the IIMC, already established by law and provides technological services to the sector, will provide a great advantage in terms of benefit and cost.

On the other hand, it is known that banks are more advanced in technological infrastructure and new product development in financial markets. Since digitalization in the insurance sector lags behind the banking, it is observed that insurance products are not included in the marketing with technology of banking products. In this case, it causes a loss of premiums in insurance. For this reason, by strengthening IIMC's digital and technological infrastructure, dependence on banking will decrease and insurance companies will be able to increase their premium production by selling more insurance products. Alternatively, cooperation between IIMC and Banks, which has a strong technology infrastructure, will give a great momentum to the insurance market. Because in the marketing of bancassurance products, the cooperation between the banks and the insurers will make a great contribution to the insurance.

However, when customers purchase an insurance product from the bank, it is easier and faster to access the bank through physical and digital applications. Banks may have to deal with customers' insurance problems in some cases and may have difficulties in finding solutions due to the technical and complex nature of the insurance business. Faced with such a situation, the banks may be reluctant to sell insurance products together with banking products. After all, it will be possible to increase the development of insurance by increasing the marketing of insurance products and the premium by enhancing the digitalization to the highest or banking level by supporting IIMC in the sector with the help of all holders.

Six suggestions were made for IIMC to have a more advanced and high level structure. These are IIMC's structure acquisition like Risk Center in the banking system, the establishment of digital identity and block chain technology, full integration of claim data, simultaneous submission of financial data to the public authority, transferring of data in other insurance branches to the center, and increasing data exchange with other holders to prevent uninsurance. It is essential that these projects be carried out as soon as possible, considering the Covid-19.

Moreover, it is important to fight frauds in the sector, and to strengthen the legislation and technological infrastructure of the Insurance Fraud Prevention Bureau by developing analytical models and early warning systems.

There is a need to expand the studies to determine the rules and principles for the information technology infrastructure and applications of the sector. These studies that need to be done within a methodology will define and strengthen the technological infrastructure of the sector. Although the activities of IIMC, which is subject to public authority control, are an example of this methodology, it is thought that expanding and updating this framework will produce positive results.

Finally, insurance companies need to closely follow the technological changes in the digital age we live in, change and manage their processes when necessary. It is extremely important that not only insurance companies but also intermediaries keep up with technological change and transformation. On the other hand, the public authority will need to remove the

obstacles that may arise and make the necessary legislative changes by following the dynamic structure of the sector in digital services. Thus, it will be a great advantage for all parties such as insurance companies, intermediaries, public authority to give the necessary support to IIMC, which is the meeting point in terms of insurance data, and to make the institution high level.

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