

The insurance industry development challenges – Insur Tech

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ABSTRACT: *The challenges that the insurance industry faced have transformed the sector through the insurtech in convenient path and becoming rudimentary function in technological respond to needs of customers and businesses, the interconnectivity among insurers and policyholders and the new possibility access in terms of hedging risks. The aim of the research is to announce and herald the process how technologies are affecting and evolving the insurance industry and the facing challenges for the companies. The study presented how datasets have transformed the insurance business and markets, also the process of simplifying claims management. Also, the paper shows how the artificial intelligence has evolved the traditional insurance from the starting point until the ending contract process, the usage of artificial intelligence as interacting tool between companies and clients or policyholders. The last chapter of the research includes quantitative interpretation of data such insurtech investments, the highest insurtech deals and USA as the leading insurance market. The innovation process including new effective technologies is considered important driver for the changes in all sectors, especially in financial sector resulting with immeasurable benefits and efficiency gains, although technological changes were accepted with doubt and uncertainty.*

KEYWORDS –Insurance. InsurTech. Insurance Technology. Developments. Telematics & Wearables.

I. INTRODUCTION

Determinants of developing insurance sector are divided into economic, demographic and institutional factors, but in the last few years the “Insurance Technology” clearly became an significant driver leading the indicators with most influence on insurance development or stagnation. The “Insurance Technology” is considered as relevant and consequential driver for demonstrating the development and factors of that process in insurance.

Insurance sector is prepared and did not excluded such developments that directly will contribute on possibilities of using new insurance application or methods for providing effective services and products, uncomplicated assessable data collection and benefiting in fraud detection that will result in the process of risk identification and alleviation measures.

InsurTech implies the use of technology with aim to ameliorate and improve the business insurance processes, company’s efficiency and to elevate the customers experience in the insurance sector and represents the combination of the “Insurance and Technology”. Despite the fact that companies benefit through using the insurtech, also under the leading facts was to make it easier for clients to buy insurance products, example included any possible policy where the technology offers online buying and research for the best products, without contacting with an insurance agent or broker. The relying base on minimal costs and efficiency to raise the profit was one over the reasons together with minimizing the physical presence on the insurance branches that would directly initiate minimal costs and working personnel that could be substituted with chat-bots and automation.

Insurance companies using the technology development are able to provide and offer insurance policies with lower prices. Initially, that at the beginning of introducing insurtech, companies had fearfulness and inconvenience situation that insurtech would pale their market share on insurance sector. The accuses toward insurers were based on the process that they were slow in adapting the new technologies and the insurers scenarios were almost 70% focused on costs function rather than fast development or insurance research (Acord & Equinix, 2014).

The type of age-old companies or businesses operating in insurance sector appears that are in conclusive suffering phase of change. Present insurance companies are threatened not only from Amazon as technology giant entering the insurance market, but also from nimble start-ups that are utilizing the innovation and technology power for their targets in the market share (Seekings, 2017). The application of innovative technology is considered to achieve efficiency and to improve underwriting savings, also contribute on pooling the risk and claims management from current written insurance policies which in general is terminated on the so known "InsurTech", which clearly is based and inspired from the excellent institutionalized concept of "FinTech" (Finance Technology). Effectively process in claims, risk evaluation, contract processing and refinement and the procedure of underwriting policies are also some occasion for the use of insurtech. Fintech and Insurtech are similar contemporary and modern solutions that are transforming each pertinent traditional sector or industry. Regulatory issues and unwillingness to establish cooperation with insurtechs are some headwinds that companies or specific people have considered as issues.

The benefits that could be gained through insurtech depends on connectivity and specific circumstances that need to be elaborated the process of integrating into the company. Each company's vendors responsible for insurance policies admit that they have Application Programming Interface that expresses support and preparedness for any software or technological integration. Some vendors will show previous pre-build integrations, which are real connectors. Elementary integrations of any uncomplicated system or innovation are not formidable, but the insurtech benefits and advantages cannot be easily integrated and realized without extended or deeper connectivity level.

The customers dilemma if InsurTech is preferably comparing to traditional insurance was based on the preferences that customer are willing face-to-face consulting and interactions with specified intermediaries in insurance, agents and brokers. Furthermore, there are few "educated" customers that their preferences would like to express through self-selection of their own insurance policy, that anytime can be canceled online. Insurance companies are developing such insurance system that could provide both methods for customers with the justification that InsurTech offers only the delivering different method for the insurance coverage that traditional are not able to offer and indicating that it is plainly to the customer choice either the InsurTech or traditional method is better. The usage of innovative technology on data analysis, internet of things and artificial intelligence allows companies to through insurtech to offer products and services with competitively prices (Cortis, Debattista, Debono and Farrell, 2019).

The insurance business operates through risk transferring from the policyholder to the insurer or the company of insurance. Similar risks are pooled in homogenous category and any claims are paid from the premiums collected and occasionally from the company's reserve funds. In this subheading, the objective is to evaluate and discuss how divisive technologies are evolving the developments and the challenges faced for the companies in the process of implementing the insurtech.

InsurTech as innovative process has attracted venture investments and the financing trends shows that investors are considering start-ups investments on massive scale. Insurance companies are planning and implementing strategic insurtech investments as startups which allows them to have share in insurance development while they will ensure capital for the business. The acquainted start-up insurance like Friendsurance, Lemonade and Policygenius have enticed sizeable investments (OECD Report, 2017).

In the last years, companies have implemented new forms of operating processes with target to improve the intermediation efficiency and claim administration. On other hand, start-up insurers that are comprised in insurance distribution have invented online websites with impeccability content, usually relying on developed application as robo-advice and artificial intelligence. The insurance development process tends to provide easy accessible and improved clients experience and insurance products to be written with low fees.

Some interpretation have predicted that through the process of implementing the insurance development on each insurance company the employee numbers will be reduced as consequence of the insurance evolutions (McKinsey, 2015).

The paper consists of several parts. The first part is related to Big Data Paradigm in which are included different fields with direct impact for the insurance technology such as Telematics, Wearables, Internet of Things and Smart Homes. The second part is with focus on Artificial Intelligence and more detailed description of usage in underwriting procedure, claims management process and customer interaction. In the third part of the paper is given explanation of Distributed Ledger Technologies. Moreover, in the next part is given numerical comparative analysis for InsurTech, the traditional practice of insurance and the development technology settlement with special focus on USA as a leading country for investment transactions in InsurTech. Finally are provided conclusion remarks and literature used for this paper.

II. BIG DATA PARADIGM

Nowadays, data is remaining an prerequisite commodity that leads different industries towards the transformation of their business activities and principles into data-driven process. Elaborating the insurance industry, the known “phenomenon” can be evaluated through scrutinizing how the used insurance models historically became supplementary adaptive by making proceedings for the fasters growing influence big data through several unstructured or semi-structured sources like social medias or sensors. The process is usually entitled as “Big Data” and is distinguished on 5V dimensions: Volume, Velocity, Variety, Veracity and Value. Each characteristic indicates how much, how fast, different kinds, truthfulness and trustworthiness and the worth of data. Insurance data proliferation has given the possibility to InsurTech and developed insurance companies to exploit distinctive selling insurance policies and take over the market competitive advantage. The impact of big data is stretched in three fields that influenced the insurance world until today: Telematics, wearable technology and internet of things.

II.I TELEMATICS

The key deliberation of insurance companies is to assure and provide convenient premium charges in the pricing strategy for the appropriately products. The risk that insurance companies bear for a long time in the automotive insurance field was related to factors affecting the claims such as age of the driver, policyholder gender, year and automobile model and experiences in claims. The presupposition indicates that all the mentioned factors in automotive sector are directly predicting the likelihood of claim. As indicated by insurers or brokers, a young driver with sport car that is part of the traffic is deemed more risky and the possibilities to be involved in accident are higher than a middle-age or experienced driver and according to that fact prices are differentiated.

What about young skilled and proficiency drivers? The pricing mechanism can be suspicious and controversial in the sense that even young drivers sometimes can be with low risk in driving ability, regardless of the age and automotive car model. The mispricing directly can assess to unfavorable selection where young drivers with low-risk level will require another insurance option and seeking coverage elsewhere, this phenomenon would finally leads to the adverse-selection spiral. The solution seems to be telematics that strives to overcome this concern of insurers through on-board technology to assess, evaluate and monitor the way of behaving for each driver individually, meaning that from the basic pool pricing model will move to individual risk model where the risk will be narrowly monitored (Barbara et al., 2017).

The devices offered by telematics technology, usually named as “black box”, will help insurers to opt diversified driving factors or metrics that can influence the premiums such as city/location, time of the day, driving mileages, drive frequency, hazard driving zones, speed of driving, acceleration rate and habits of breaking. All these metrics are examined and will be considered by insurers to underwrite precise and individualized pricing model, which finally gives the right to previous policyholders part of the pool insurance

system to be released from the features as age or gender and to evidence their driving merit as safely drivers indicating good risk and unlikely to be part of any accidents or require claim.

II.II WEARABLES

The wrist-borne is typically explaining the nature of wearables, for example Apple watch or FitBit, although the technology currently through multiplicity sensors putted in the devices are generating mass data. The usage of these technological devices is remaining affordable for the citizens of each country and similarly to the telematics utilization, insurers are benefiting and using this raising massive data to meliorate the individual pricing strategy.

The self-quantified wearable data are incorporated into insurers products that directly would lead to a potential insurance advantages. The innovation of insurance products and the availability of technology through use of data will straightforward potential path for insurers, especially in health and life insurance, to overlay difficult risks or uninsurable risks into assessable method of covered risks. The wearable potential includes the biometric information that is generated from physical activities (like walking number of steps, sitting time or even cycling miles), cardiovascular measurements (pressure of blood, heart rate, variability of heart rate and electrocardiogram), sleep quantity and quality data, also the temperature of body, blood sugar and currently the exposure to air pollution. Worthy of mention, it should not be surprise as insurance companies use wearables as primary interest into long-term health care rather than it is used from life insurance companies.

Similarly as telematics, the usage of wearables assures the insurers with ‘tool’ to compute or at least be close to the policyholders underlying risks that could be insured. The opportunities that wearables provide spectrum of insurance industry, probably go beyond of that improvement of the actual mortality and morbidity. In the space of wearables, the possibilities for insurance companies seems to be and appear excellent. The developing nature of the wearables for company’s purposes indicates that there are many concerns and deliberation to overcome before proceeding to the mainstream utilization. The principal among all issues and concerns is the preciseness and accuracy used in reliability of devices and pricing model.

II.III SMART-HOMES AND INTERNET OF THINGS

Physical devices as network implanted with sensors and connectivity, permitting communications and transmission of insurance data is known as Internet of Things. Variations of applications as home smart devices (smoking alarms, fridges and thermostats), also devices for monitoring the environmental (inspecting the air and quality of water) and has penetrated the market to that level that forecasting scenarios suggested that until 2020, the Internet of Things will constitute 30 billion objects (Nordrum, 2016) and would reach the market value globally around \$7.1 trillion (Hsua and Lin, 2016).

As telematics and wearables, Internet of Things as well relieves purveying of new information data with influence and interest to the insurance segment. Comparing with telematics and wearables that use this data for pricing power, the Internet of Things utilizing this data extend beyond the pricing accurately up to situation when insurers give discount to policyholders that when they are away from home will lock their windows and doors with sensor-based system. The usage of smart home devices, permits the insurance company to proceed toward prospectively being active in the process of precisely risk managing. Before the digitalization of the insurance industry, in the claims assessment the impact of insurers was equal to zero intervention as traditional model of insurance, but with the Internet of Things data for smart homes allows insurers to sustain new type of interaction with customers. The insurers operations creates a relationship where they seize an functional role in customer engaging in the context of sales and claims. This relationship was accurately explained by insurers in example of data obtained through monitoring sensors of water pressure that is utilized to alert the customers of water leakage risk before harmful significant damage occurs.

III. ARTIFICIAL INTELLIGENCE

Insurance companies so far have adopted the use of Artificial Intelligence techniques to cognize the big data raw and to acquire useful cognitive ability. Profound learning, neural networks and naturalistic language elaborating, besides other factors, are assisting in ameliorated insurance operations and improving the customer's gratification as naturally consequence.

III.I MACHINE LEARNING AND ARTIFICIAL INTELLIGENCE IN THE UNDERWRITING PROCEDURE

Clearly, it is an inevitable thing that all insurance underwriters in the future will utilize and employ machine learning and artificial intelligence as overriding innovative technologies as their underwriting vitality decision for the near future. The responsibility of processing the big data and the algorithms of artificial intelligence permits and authorizes underwriters to refine and comprehend far more the data than traditional method of processing the data, likewise these techniques assures accurately underwriting prescient computation.

The usage of predictive analytics models ensues the process of applying appropriate premiums for insurance underwriters and automatically facilitates the procedure for underwriters to minimize the loss ratios. Usually, in the past motoric insurance applied premiums are conventionally charged for prearranged amount for a period of one year. The approach of motor insurance were policyholders pay the fixed same amount regardless of the motoric use, would have not been applied that premium is the devices as telematics were used (Azzopardi & Cortis, 2013). Through the device usage, instantly will be send the data from the vehicle/motor insured to the management central system of insurers, indicating that with the obtained assistance of artificial intelligence methods insurance companies establish and evolve a system of continuous modified policy prices, as a substitute of making one-off payment.

Underwriting policies for traditional life insurance includes the procedure of asking specific questions due to prediction of proposer life events. An Artificial Intelligence developed system by Lapetus Solutions, a start-up insurtech US company, enabled partnering with insurance life companies to ensure quotations through the imperceptible technology of facial analytics until that time and stage of development in insurance. The implemented system contains analytic sensors, also dynamic questions and as client requiring insurance quotation the company will ask to send just a 'selfie' portrait photography, where the technology through the provided image will scrutinize and determine the proposers health status, susceptibility of diseases and longevity (Lapetus Solutions, 2017).

Besides the photography, the system systematically formulates variety questions specifically to the assured responses from clients. Furthermore, the questions try to ensure veracity and insights of longevity of individuals in opposition to the proposal forms type of questions that could be found in normally procedure of life insurance. The benefits and satisfaction of applying such system is that the entire process to be completed takes only few minutes. Artificial Intelligence also has been adopted by insurance industry in health and accident insurance. Implanted innovative devices like sensors and wearables that directly use the Artificial Intelligence assures insurance companies with prized and estimable data relating to health of insured individuals. An additional advantage using the Artificial Intelligence is that it would impact in education and advise of customers about not making inappropriate insurance solutions and choices in context of lifestyle that automatically will result in lowering costs for insurers and policyholders.

III.II ARTIFICIAL INTELLIGENCE IN CLAIMS MANAGEMENT PROCESS

Currently, the Artificial Intelligence is proceeding over commanding and controlling correlated with the run of processing claims plant. An extraordinary case occurred in Japan, where the system of Artificial Intelligence has superseded a team consisting more than 30 employees that were in charge for calculating payouts for the customers (McCurry, 2017). The reality indicates that this is not destruction and obscurity situations, observing from the perspective of employment as the technological developments could lead to the situations that insurance handlers have the possibility to deal with challenging circumstances rather than the irksome ones. For

instance, Lemonade as start-up insurance company in property segment, has introduced an automated process of claims and filing a new claim remain respectively easy. The programmed smart applications will require from the proposals some comprehensive questions to assemble fundamental information on the claim and this evidences that the insured individuals have no obligations to replenish a claim form, but only to dispense a synopsis of the claim, such as which property is damaged, through the uploaded photos from smartphone. The provided data through the system of Artificial Intelligence will be examined and analyzed and also will run through 18 algorithms for anti-fraud. Insurers explained that non-complex claims are acquiesce within seconds, while intricate and complicated claims are submitted over to responsible managers in the claims department. Implementing such technology is not only highlighting the advantages, but also facilitating the complexity of managing claims such as, using flying drones to take and provide pictures of the remarkable property damages and analytic images to quantify and measure the damages (Cognizant, 2017).

An technological company from Australia, introduced an Artificial Intelligence system for investigating fraud that offers backing for insurance companies in the fraudulent claims detection and discernment. While the developing scope of technological system like this was assisting the insurers in forestalling fraud, likewise influences the operations of insurance companies in lowering administration costs. Such system provides activities in investigating social medias, criminal registry, vehicle and property history and other submitted or required documentation, adjusting and providing more time for the department of claims to scrutinize and investigate results and complete claims on convenient time. In the market, homogeneous services that hamper or decimate possible fraudulent insurance policies in the stage of underwriting are available, for instance ThreatMetrix.

III.III ARTIFICIAL INTELLIGENCE IN CUSTOMER INTERACTION

The relationship between insurance industry and customers is characterized and considered as rarely innovative when it comes to the customer service. Despite the fact, few developed insurance companies initiated progress and implemented the chat-bots usage in their daily basis operations, identical trend of innovation as other industries. Chat-bots are part of the Artificial Intelligence connected with applications, such as Facebook Messenger, with essential intention to interact with potential and existing insurance customers, representing and acting virtually the customer's service. Through the natural language, based on the requirements and answers of customers the chat-bots will intercommunicate with clients in determining the appropriate insurance types or products. The advantages of having chat-bots in the insurance operations that are hold by Artificial Intelligence relieve the interaction with potential or existing policyholders merely and faster than a human representative. Furthermore, intermediaries like agents and brokers operating in insurance sector also have included the service of chat-bots, providing real-time service and product quotation through the usage of messaging applications. In context of customers, the application of chatbots also recommends clients in the choices of insurance products suited and based on their needs

IV. DISTRIBUTED LEDGER TECHNOLOGIES

The usage of distributed ledger technology assures possibility for schismatic developments in the insurance progress and technology evaluation. Distributed ledger technologies provides favorable benefits to insurance companies in the daily activities, despite the fact that automatically generates competitiveness within the insurance industry.

IV.I IMPROVING CURRENT PROCESSES DURING DISTRIBUTED LEDGER TECHNOLOGIES

The distributed ledger technology scope is not only to verify the process of transactions, for instance cryptocurrencies, but the primary aim is the identity and smart contract verification. The effects of using Distributed Ledger Technologies have been summarized in the sector of insurance in four scopes such as identities, space, time and mutuality (Mainelli & Gunten, 2014). The authors concluded that through the process of checking identity the DLTs will ameliorate the insurance underwriting procedure and improvements in the

“know your customer” requirements for an insurance company (Mainelli and Gunter, 2014; Mainelli and Smith, 2015).

Insurers in the process of improving identity would particularly limit the claims that can be multiple required for the same incident. The identity improvements was first used from insurance companies in the case of airplane delays, where the policyholders could not have the possibility to claim twice for the same reason or incident.

Insurance companies have considered additional scenarios with the share of financial and health transactions over the Distributed Ledger Technology, where with permission of each policyholder, the insurer or agents are able to underwrite health insurance quoted premium without assuring data that needs to be fulfilled in traditional forms by insurance customers. Furthermore, the analyzing process of personal data and the combination with external gathered data, such as individual wearables ensured by insurance companies, creates the model that facilitates risk coverage and premiums in real-time readjustments, that significantly foreshortens the time of products provided by insurers. Impediment from the Distributed Ledger Technologies could lead to elongating of time since the recorded transactions could not be changed or deleted, that automatically alerts the percipience of long-term contracts. Currently the model of insurance business is localized, since the requirements and products are provided by specific country, region and market.

Distributed Ledge Technologies are allocated over network of computers, that “covers” more insured space globally. Lorenz et. Al (2016) indicated that the Distributed Ledge Technologies significantly can be used in micro-insurance in the markets that are in emerging process, mentioning the crop insurance for farmers as example. Claims for such coverage are automated since the payments are made automatically due to the weather conditions, with no need of evaluation from the scene.

IV.II P2P INSURANCE

The lessening of space directly will result in peer-to-peer insurance generation and would act mutually, the DTLs possible effects on insurance would reshape the insurance industry for specific coverages, for example can be mentioned Uber and AirBnB that have disunited their particular industries.

V. INSURTECH GLOBALLY DEVELOPMENT - USA

Insurance generally speaking with numbers is a trillion dollar economic industry and nowadays keeps the trend of getting substantial and bigger. Being innovative and to follow the customers demand for products and services, almost all developed companies have implemented the insurtech. The traditional practice of insurance and the development technology settlement as innovative combination has been growingly in the recent years.

Based on insurance study pointed out by Porch, there was that currently in the insurtech activities there are three foremost units or countries recognized for the administrated innovation in insurance industry. The first country is United States of America with approximately 1365 insurtech companies, where the success of insurance development for many companies was based on the competitive insurance market and the entrepreneurial mindset. The study presented USA as home for the innovative insurance process for some prominent brands and names in technology developments of insurance.

The President of Porch, Adam Korncik, responsible for Insurtech department concluded that United States of America with the share of funding indicates that is the largest and tremendous insurance market and historically marked as the leading country for easy-natural and fit for implementing of technologies, especially insurance technology.

Beside USA, comparably the United Kingdom and Germany are considered as advanced economies with meaningful technology capabilities and substantial enormous insurance markets. The report of Porch shows some general findings for the insurance global level, first of all showing that globally there exit more than 3470 insurtech companies. Secondly, more than 1500 companies related to insurtech have emerged in the last recent years. The venture capital funding related to insurtech companies, in the last decade is transacting growth at average of 85% year-after-year. The highest acquisition in 2020 was noticed in United States, where from top 20 companies 15 were based in United States.

InsurTech by the numbers

Quarterly InsurTech funding volume – all stages

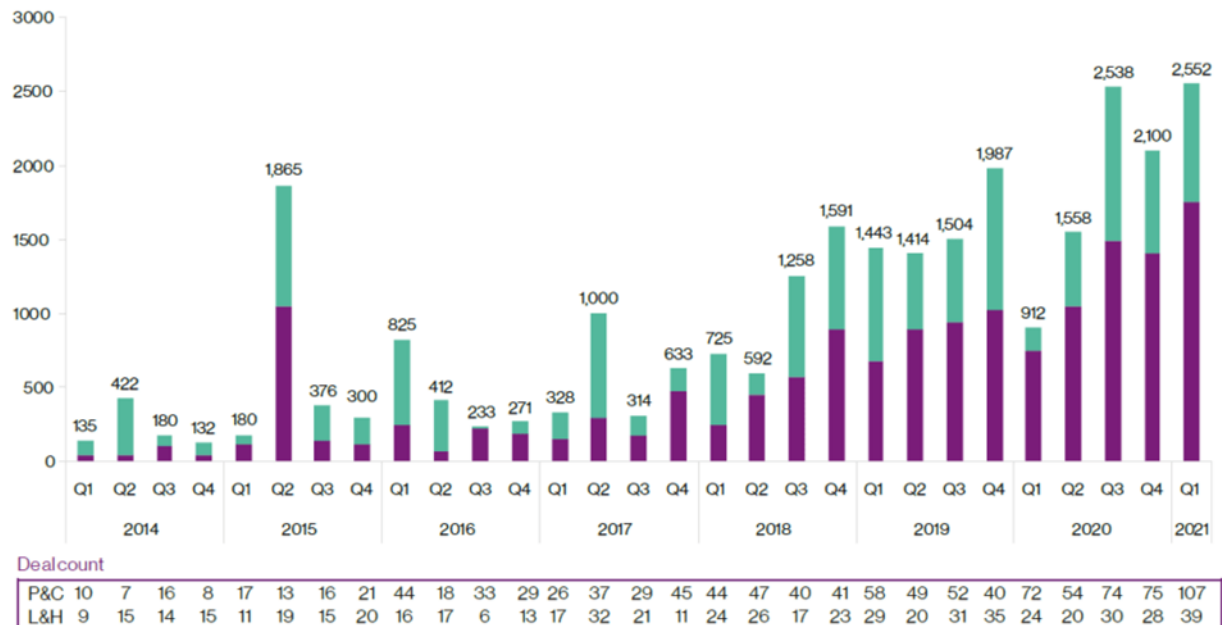


Figure 1: Insur Tech by the numbers

Generally, on global level the insurtech investment reached an all-time high in first quarter of 2021. The funding investments in insurtech achieved 2.5 billion dollars with 146 deals, comparing to last quarter there was marked increase with 22% in funding investments and 42% on across the deals. Each year, insurtech indicated international increase and marking the geographically diversified start-ups including 24 countries such as Estonia and United Arab Emirates. Remarking in 2020, almost 38 different countries have raised their investments in insurtechs, which comparing to 2016 was 29 different countries. In the second quarter of 2015, there was noticed record insurance level of funding comparing to previous quarter or years, the record of funding from the first quarter of 2015 reflected with 936% increase.

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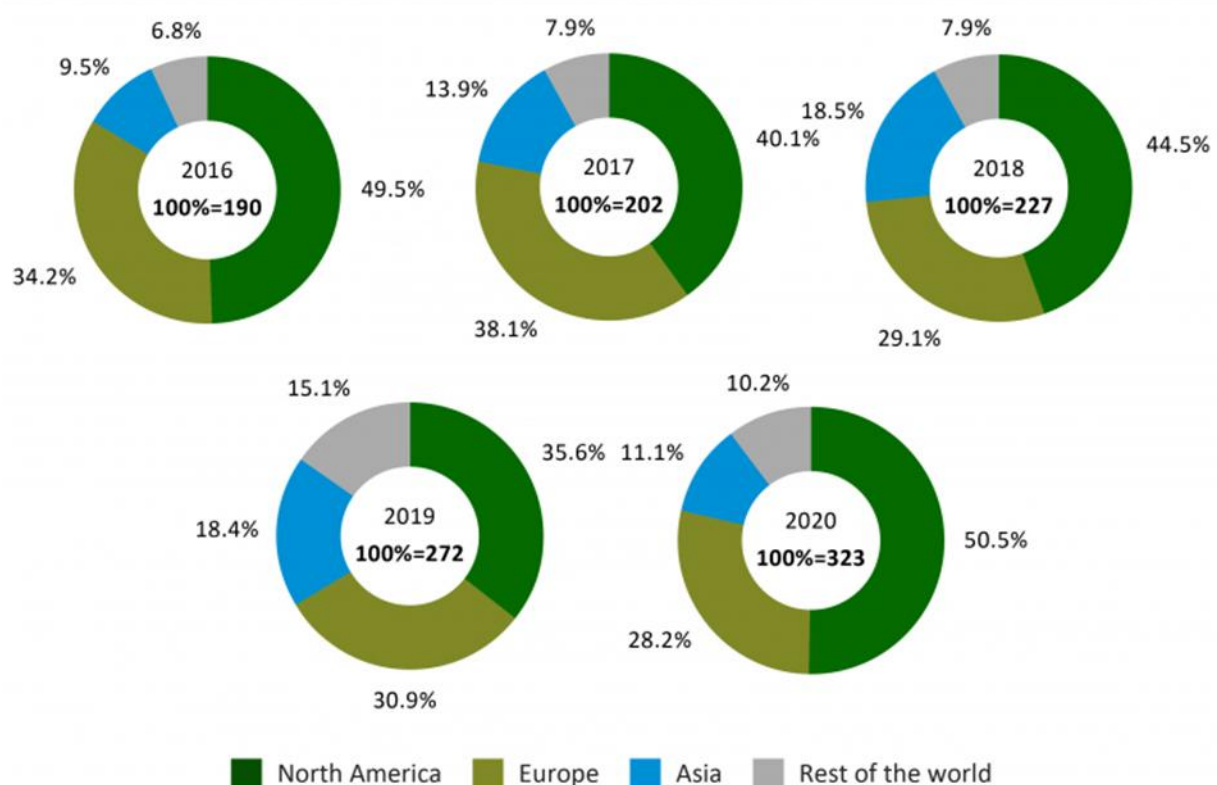


Figure 2: InsurTech investments by region (as a % of numbers of deals)

American companies in 2020 have made more than half of the investment transactions in global level for InsurTech. North American companies in 2020 have distinguished remarkable increase in the number of total investment funding deals comparing to 2019, marking an increase of 14.8% up to 50.5% totally. The increment of investments shows a rejuvenate interest from the investors that are targeting the development of remote insurance service.

Funding investments for companies was needed process either to harmonize the pandemic financial situation or use the new opportunities as advantage. While the deals of insurtech funding raise in North America, the deal activity on the Asian share decreased by 7.3%. The deal decreased activity was due to lockdown period on the Asian region to prevent the virus spread. Despite the fact that in 2021 the lockdown was ending in the Asian region there was noticed a sluggish recovery in funding investments as result of withdrew of foreign investors from the region due to political instability. On other hand, insurance companies from Europe despite the fact that noticed increase in funding activities and completing 91 transactions in 2020, but also there was recorded decrease by 2.7% in the share of European region due to reason that investors were more interested and shifted the investment focus on insurance companies from North America.

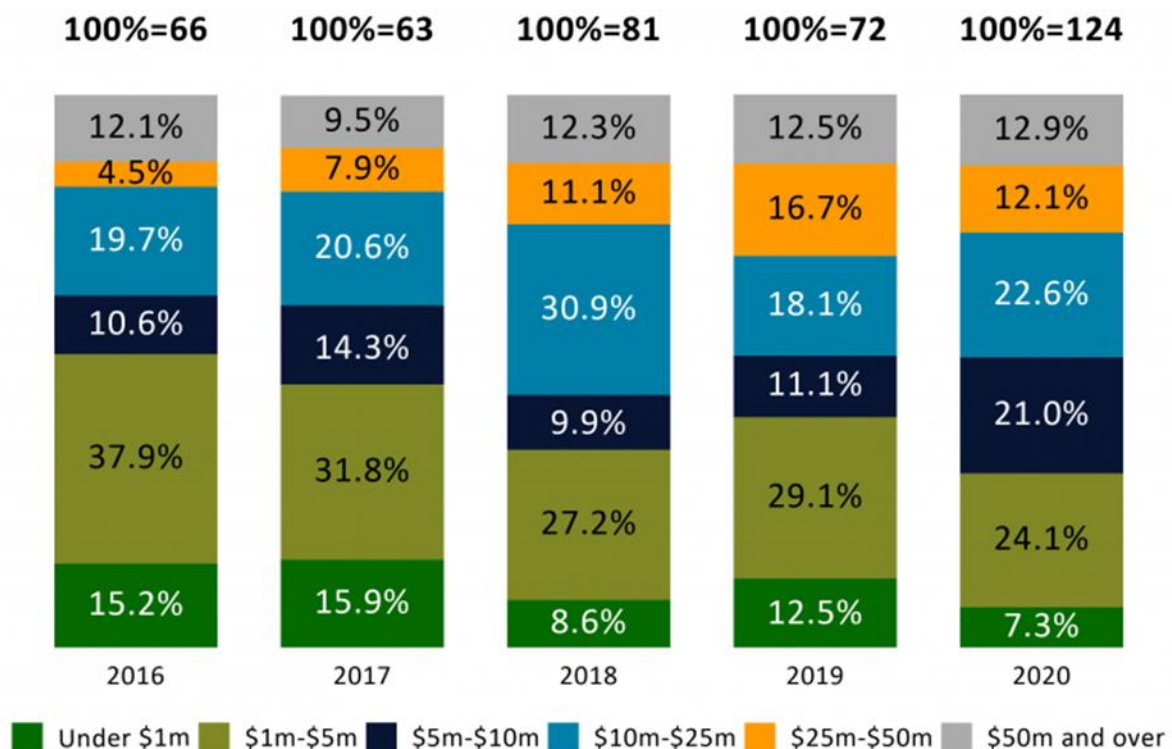


Figure 3: InsurTech investments in United States by deal size, 2016-2020 (as % of numbers of deals)

The table number 3 explains the percentage of number of deals in United States by size deal from 2016 until 2020. Results are presented in six forms such as investments under 1 million \$, from 1 to 5 million \$, from 5 to 10 million \$, from 10 to 25 million \$, from 25 to 50 million \$ and the last category of investments is 50 million and over. The number of InsurTech deals has increased gradually from 2017 and ending with the highest record of 124 deals in 2020. The share of under 1 million % deals, in 2020 not astonished decreased up to 7.3%, which was the lowest percentage in the analyzed 5 years. This phenomenon happened due to investors back up funding deals with higher risks and the focus was displacement to new investments in companies that were in early-stage of operating.

The third category, shares of value from 5 to 10 million dollars in the same year raise by 9.1% amounting up to 21% which also indicates the largest share in the analyzed years for the insurtech sector comparing until 2016. The increase in the middle category was motivated and driven as result of pandemic situation in the world, where investors have used it as new growth opportunity to invest in the small and medium category. The newly investments have supported and contributed to the portfolio of each company to maintain the capital and the growth opportunities through funding.

In the last and fundamental category, the share of deals up to 50 million dollars and over recorded an funding extend of 0.4% designating that the focus of investors was to attitude with the strategy of contributing to large insurtech companies and the exquisite increase directly helped the companies to expend their insurance products in other states, regions and countries.

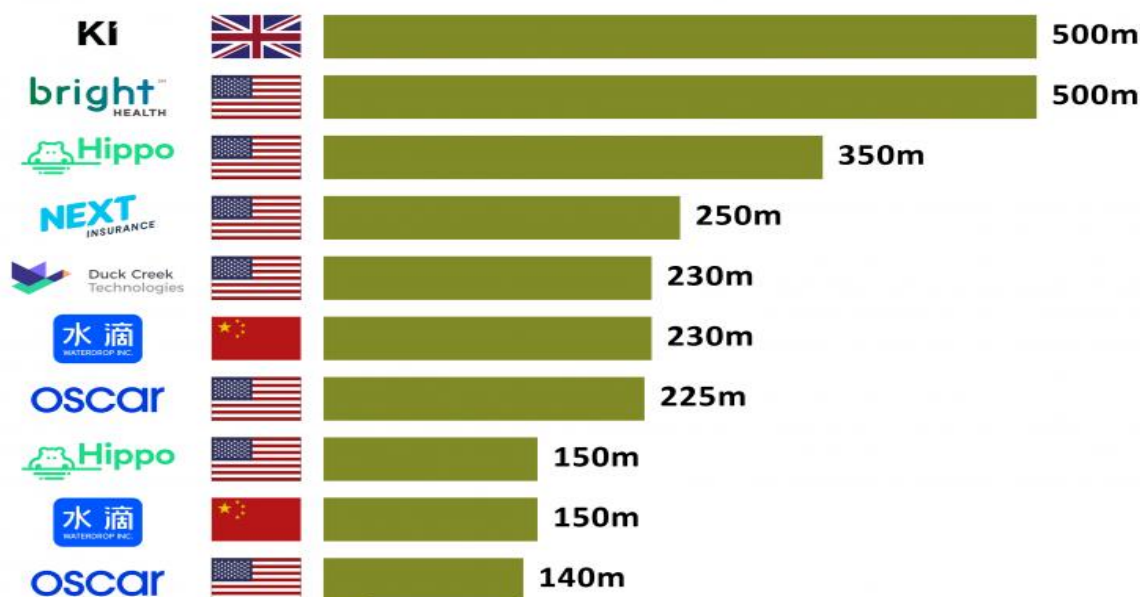


Figure 4: Global top 10 InsurTech deals – 2020

The main top 10 Insurtech funding deals in insurance in 2020 globally increased over 2.6bn dollars, recording around 44.0% of the overall sector investments in the particular year. The United States possess two out of three peak deals, investments made by Bright Health and Hippo Insurance companies.

Bright Health, which is health service platform, increased investment round up to 500m dollars and the investment was utilized to ladder the transformation model and used to accomplish the intention for reducing costs of the health care, also at the same time ameliorate financial outcomes, working experience and customer access. The second company is Hippo Insurance, that with the \$350m investment through use of the insurance technology assistances homeowners to secure and preserve their properties. The scope of the funding was utilizing and supporting the company's insurance activities and extension of the products in additional regions and states with target to achieve 95% of overall homeowners in United States in the following year, beside the situation the funding also contributed in assuring additional capital for the insurance and reinsurance venture.

As presented in the table, the largest and sizeable deal of funding in 2020 was completed by Ki Insurance, the investment was evaluated as the first full or comprehensive digital and algorithmically operated Lloyd's of London syndicate, where Financial Holdings and Blackstone Tactical Opportunities raised private equity of \$500 million. The rapid scale of business were the funding benefits of the company and supporting the strategic plan to offer truthfully differentiated products to intermediaries and customers. Beside UK and USA, under the largest insurtech deals was completed in China, Waterdrop company invested around \$230m with target to provide solutions for high medical fees problem. The investment platform was utilized to exploit the artificial intelligence and big data for the company's insurance products, services and consultation.

VI. CONCLUSION

Insurance companies are embracing the new insurance technology developments known as "insurtech" and over the past few years statistics resulted that companies are heavily concentrated investing on these developments. The primary reason why insurance companies or insurers are partnering with insurtechs is the expending process of their existing portfolio products, oversimplify internal activities, lower the costs without applications, expertise or implementing specific strategy. Nowadays, insurtech partnering companies are

accepted as catalyst and accelerant indispensable to endeavor the growth and to velocity the development of new insurance policies and offers.

Transformation of the insurance industry is represented as the convergence and digitalization technology offering innovation and growth. InsurTech indicates the insurance and technology combination, where emerging insurance industries utilize technology applications and innovations to modernize the traditional operating insurance.

The results were notifiable that the big data is and will revolutionize the insurance sector. Despite the fact that wearables, telematics and Internet of things are usually providing data and in combination with Artificial Intelligence advancements are facilitating the process of having more personalized insurance products offered to the customers. Based on numbers, the American companies in the last years have the lead of investments transactions in global InsurTech level, also United States possess two out of three hugest deals in InsurTech investments, together with company from United Kingdom, Ki Insurance.

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