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INNOVATIVE ACTIVITIES WITHIN UKRAINIAN INSURANCE COMPANIES

Abstract. *The purpose of this research is to identify the role of innovations in overcoming the problems arising out of activities within insurance companies. Against the background of fluctuating marketing environment and high level of business risks, the staff of insurance companies is in high demand of scientifically substantiated recommendations on the very innovations which could bring business processes to more increased efficiency level. The research of innovative activities within insurance companies in this paper is done using the following logical sequence: the place of innovations in the deployment of 4 Industrial Revolutions and their role in the modern insurance business (within Ukraine and abroad) about its fundamental and subsidiary business processes is displayed; common problems of national insurance companies and selected risk factors varying in terms of customer market (B2B or B2C), experience and foreign capital participation are described; the most practical innovative solutions for mitigation of identified risks in activities within insurance companies are suggested. The research presents the results of the sample survey of 52 insurance companies. The survey focused on hypotheses relating to as follows: threats to the business environment of insurance companies; directions for employment of innovations to develop insurance companies' business; differences in assessment of threats to business environment; differences in opportunities and directions of innovations. IBM SPSS 20 software was used for processing of the data obtained. The following research methods were used to analyse the data: frequency distribution of variables, cross-tabulation and nonparametric tests of variables. The research confirms that from 51.5 to 77 % of Ukrainian insurance companies are faced with some difficulties in their performance. The risk factors being the most relevant for insurance companies are low paying capacity of customers at the insurance market (1st place), high competition (2nd place), imperfect legislation (3rd place). The research identified the following significant problems associated with company internal environment: lacking a definite strategic business development plan (1st place), problems involving qualified staff (2nd place) and problems with the interaction of structural units (3rd place). The research empirically lends support to specific directions of putting into practice and nature of innovations necessary for countering specific threats in their activities. Research findings can be of some practical value for improved efficiency of business processes both for Ukrainian and foreign insurance companies operating under the conditions of ever-changing factors of the business environment.*

Keywords: insurance companies, innovations, business processes, B2C market, B2B market.

Introduction. The current state of social and economic development of Ukraine is characterised by a deep systemic crisis that is manifested particularly by insufficiencies in the development of commodity and financial markets and the high level of business risk associated with the variability and uncertainty of the

business environment. Executives of the companies operating in Ukraine and acting as experts during the Executive Opinion Survey conducted by the World Economic Forum singled out the following business risks of deepest concern globally: profound social instability, energy price shock, interstate conflict, failure of critical infrastructure, fiscal crises, unemployment or underemployment (World Economic Forum, 2019). A stable and developed insurance market guarantees that reducing business risks enhances the attractiveness of the Ukrainian economy for foreign investors and engages Ukraine in world economic processes. The insurance market in Ukraine reflects all negative aspects of the financial market and economy as a whole. The essential problems insurance companies come across are as follows: imperfect insurance legislation, high competition, scarce financial resources of the business, low capitalisation of insurance companies, poorly developed infrastructure of the insurance market, low level of credibility in insurance institute, lack of qualified staff, insufficiently embedded of ICT etc. Therefore, the introduction of innovations into activities within insurance companies may serve a useful tool of addressing such problems which will foster further growth of the insurance market in Ukraine. The nature of innovations required for implementation is determined by the real-time development of the insurance market in Ukraine and the unique features of business processes in this area. Innovations are the key competitive advantages of insurance companies under the conditions of changing and risk-related market environment.

Literature Review. The research literature presents various approaches to the definition of innovations and their types. It is worth mentioning that up to this moment there exists no agreed interpretation of the very notion «innovation» among scientists and practitioners as explicitly witnessed by the number of its definitions varying from 41 (Edison, bin Ali & Torkar, 2013) to 62 (Shaver, 2014). From the historical point of view, the 1st Industrial Revolution (second half XVII – mid XVIII century) gave a rapid rise to capitalism in Europe which was directly associated with the implementation of large-scale innovations virtually in all industrial sectors (Engels & Wishnewetzky, 1892; Tomory, 2016). During the 2nd Industrial Revolution (last third XIX – 20s XX century), innovative development of the economy rested largely on discoveries which were not merely the result of particular inventions but explained instead by the implementation of a system-based approach to the arrangement of scientific activities (Smil, 2005). Successful operations of such prominent engineers as Thomas Edison, Nikola Tesla, Henry Ford and many others are another proof of such a situation. Businessmen themselves are just the driving force which is able to gain competitive advantages at the market owing to the more efficient combination of factors of production including with the employment of innovations (Schumpeter, 1912; Sledzik, 2013). P. Drucker as one of the pioneers in research of the role of innovations in business activities mentioned that «systematic innovation consists in a deliberate and structured search for change and in a systematic analysis of the opportunities for social or economic innovation that such a change could make possible» (Drucker, 1985). Modern scientific literature providing insight into the research of processes of the 3rd Industrial Revolution (80s XX – 20s XXI century) makes extensive use of the notion «innovation» as follows: «production or adoption, assimilation, and exploitation of a value-added novelty in economic and social spheres; renewal and enlargement of products, services, and markets; development of new methods of production; and establishment of new management systems. It is both a process and an outcome» (Crossan & Apaydin, 2010). The authors of large-scale research have analysed more than 13 thousand papers during 1949-2010 prefer this very approach to highlighting the concept «innovations» in the scientific literature (Edison, bin Ali & Torkar, 2013).

The deployment of the 4th Industrial Revolution further intensified the role of innovation in the economic development of companies and countries in a highly competitive business environment (Schwab, 2017; Mykhailychenko, 2019). For example, companies that first («front runners») use the opportunities provided by artificial intelligence technologies, can anticipate a cumulative 122% cash flow change, while «followers» will see a significantly lower impact of only 10% cash flow (Leurent, de Boer et al., 2019). In the current conditions involving uncertainty around the business environment, the most significant effect

can produce so-called «Disruptive innovations» - innovative solutions in the business model of the company, which, by offering new products to consumers, create a new market, while destroying the old one (Christensen et al., 2018; Schiavi & Behr, 2018).

The relatively large number of scientists and practitioners both within Ukraine and abroad deal actively with the issues associated with innovative aspects of insurance business in the emerging markets, i.e. financial, technological, organisational etc. The problems focused on by Ukrainian researchers are as follows: place and role of innovations among the driving forces of the Ukrainian insurance market (Goryslavets, 2013; Denisenko & Korgun, 2015); difficulties around the development of new insurance products against the background of immature insurance culture in place in post-Soviet societies (Puriy, 2018), specific aspects of the development of high-technological innovative insurance products as exemplified by the number of Ukrainian companies (Zavoloka, Kolesnik & Silina, 2018); analysis of how to use best practices of innovative insurance business in Ukraine in the area of personal insurance (Tretiak, 2017), vehicle insurance (Salaychuk, 2017) and tourism (Okhrimenko, 2005).

The innovations in the insurance business, including those in emerging markets (Ukraine included) enjoy special attention of foreign scientists and specialists from leading international consulting companies. Innovation is the critical factor of shaping business models for insurance companies (Yoder, Rao & Bajowala, 2012; Mader, Fenton & Ellerbrock, 2017, Porrini, 2018).

Innovative activities of insurance companies in the form of current information and computer technologies are scrutinised in the collective monograph uniting 75 authors with 70% having a postgraduate degree (VanderLinden et al., 2018). Regularly big international consulting and insurance companies issue special reports based on expert opinions of the market players. It is worth mentioning the following analytical materials with insight into the following topics: PwC – the role of innovations as factors of shaping business models for all-type insurance companies, as well as the role of emerging markets in activities within insurance companies (Yoder, Rao & Bajowala, 2012; McMillen, Carr & Trowbridge, 2019; Mader, Fenton & Ellerbrock, 2017); EY - opportunities and risks within rapid-growth markets (Crawford et al., 2019); Accenture – analysis of the emerging IT developments that will produce the most significant impact on insurance organisations and technology risks in the insurance business (Cusano & Starrs, 2017; Accenture, 2017).

Research purpose and objectives. In the first half of 2018, 291 insurance companies were registered at the insurance market of Ukraine, while their number is continuously decreasing (110 companies over the last five years). The main share of gross insurance premiums in the risk insurance market (98%) is accumulated by TOP-100 insurers, which make 38.5% their total number. It suggests that the number of companies that work is two times less than those registered. On the positive side, this involves the expansion of the activities of foreign insurance companies, which catalyses innovative processes. Nowadays, experts from insurance companies require of the Ukrainian insurance market's researchers scientifically substantiated recommendations on which innovations could increase the efficiency of the insurance business. These recommendations could be developed only upon the analysis of current market trends. The purpose of this research is to identify the role of innovations in overcoming the problems arising around activities of insurance companies at the Ukrainian market against the background of fluctuating marketing environment and high level of business risks. The objectives of this research are as follows: presentation of classification of innovations into insurance in terms of their implementation in specific fundamental and subsidiary business processes; identification of core risk factors in activities within Ukrainian insurance companies; determination of directions for implementation of innovations in business processes of insurance companies to address their operating problems.

Methodology and research method. Business processes of insurance companies and innovations. Innovations should be treated as a result of human creative activity, aimed at transforming a particular aspect of management in order to achieve better results. The management of an insurance company

should take decisions on consistent implementation of specific innovations with due regard to their ability to tackle the problems the company came across (Gryshchenko, 2015).

Innovations should be considered concerning some business processes in activities within insurance companies. Insurance business involves a range of business processes (Accenture.com, 2019) which are classified according to the following criteria: relative to the order of implementation, results, degree of renewal, practical orientation, and the impact on financial results (Sholoiko, 2016; Page, 2015). Business processes in insurance activities have their specific characteristics including: a long life, and avoidance of separation from the insurer, significant regulation, lack of patents, etc. (Coric & Bara, 2014).

Insurance activity is interpreted on assumptions which permit to distinguish its business processes and create classifications of the effectiveness of innovations. Insurance activity is a regulated economic relationship between traders within the insurance market regarding insurance, reinsurance, co-insurance, financial and other activities in order to meet the socio-economic interests of the insurer, the insured and other stakeholders within the insurance market.

In terms of evaluating the effectiveness of innovation, it would be essential to classify innovation by the type of their activity: innovations in insurance, reinsurance, co-insurance, innovations in financial activities, innovations in other activities; and for the fundamental and subsidiary business processes. The core business processes involving insurance include: analysis of market opportunities (market segmentation, determinations of consumer behaviour patterns, positioning, definitions of a competitive strategy, valuations of market share); developments of a marketing complex (developments of insurance products, calculations of tariffs, selections of distribution channels and promotion, formations of partnership relations with market actors); selling; underwriting; and settlements involving insurance cases. Reinsurance includes, in addition to those listed above, the process associated with the transferor acceptance of risks; and financial activity includes the process of formation and placement of insurance reserves, management activities with other assets. Subsidiary business processes are practically the same in any kind of activity and include: accounting, legal services, recruitment and training of personnel, IT services, labour protection, etc.

This classification permits to have a precise understanding of which business process in which types of activities requires the introduction of innovations and determine their impact on enhancing the competitive advantages of insurance companies. Development and introduction of new insurance products, information and computer technologies, as well as improvement of company management and organisational structure, are the innovations of significant value.

The introduction of innovations in the activities of insurance companies is a risky process (Zakolodyazhnyi, 2015). To reduce the level of risk in innovation, each insurance company should have a clear innovative strategy. The innovative strategy is a conscious way to create sustainable competitive advantages of an insurance company with the help of specific methods, tools and principles. Appropriate methods, tools and principles cannot be selected without the understanding of the motives of the insurance market subjects, directions of innovation activity by types of activity and business processes and sources of possible risks.

Research parameters. The research is of academic type since it was performed by University scholars and professors (McCuen, 1996). The number of respondents is 52. The survey period is April-May 2017. The sample is random and representative. The purpose of this research is to identify directions for employing innovations to mitigate threats of Ukrainian business environment on the performance of insurance companies in the insurance market. 12 hypotheses making the research purpose more precise were tested.

The theory of insurance and innovative activities establishes a scientific rationale for key-dependent and independent variables, their operationalisation; determines the research type (descriptive (Malhotra, 2018)); specifies the sample survey type; formulates search questions and hypotheses; draws up a

questioner; develops a strategy for collected data analysis. Assumptions and deliverables of experts engaged in the study of innovative activity models were put into practical terms while shaping the research methodology.

IBM SPSS Statistics (ver.20) software was used to process obtained survey findings which are designed for marketing research data handling in a qualified manner. All questioner results were tested for invalid answers, sorted out respectively and then processed. The following techniques were applied for data analyses: frequency distribution of variables, construction of contingency tables (cross-tabulation) and nonparametric tests of variables.

Results. Innovations: Directions for implementation. Yielded results of immense practical benefit give a visual picture of methods, tools and risks of introducing innovations. Testing of proposed hypotheses displays the following results.

Hypothesis 1. The bare majority of insurance companies are faced with difficulties in their operations at the Ukrainian market.

The survey furnished strong evidence that 65% of insurance companies in sampling are faced with difficulties in their operations. The share of insurance companies in Ukraine coming across difficulties is within the following range (with 0.95 confidence): from 51.5% to 77%. Hence, our hypothesis stating that the bare majority of insurance companies run into difficulties while operating at the Ukrainian market was confirmed. Adverse trends were featuring the current state of affairs at the Ukrainian insurance market shape mostly existing difficulties in operations of insurance companies.

Hypothesis 2. The significant difficulties in operations of insurance companies at the Ukrainian market are related to restrictions in the legislation.

Testing of Hypothesis 2 presents the significant difficulties in the operations of insurance companies as follows (Table 1).

**Table 1. Difficulties of insurance companies' activities at the Ukrainian market
(1 – minimum value, 10 – maximum value)**

Ratio	Difficulties					
	Low paying capacity	High competition	Imperfect legislation	Lack of qualified personnel	Scarce financial resources	Relations with market entities
The average value of answers	7.83	7.80	5.96	4.33	3.90	4.28
Ranking	1	2	3	4	6	5

Sources: developed by the authors

The comparison of our average respondents' answers reflected that the significant difficulties include: low paying capacity (1st place), high competition (2nd place) and imperfect legislation (3rd place).

Hypothesis 3. Drop-in incomes of Ukrainians seem to be the critical consumer-related threats for insurance companies in Ukraine.

For testing Hypothesis 3, comparison of average values of answers was carried out to establish that the most critical threats related to working with consumers in insurance companies in Ukraine are as follows: a drop in incomes (1st place) and a high degree of distrust of financial institutions (2nd place) (Table 2).

Hence, Hypothesis 3 was confirmed. The significance of these 2 factors is the effect of their mutually reinforcing influence on the activities of insurance companies. In the face of distrust of financial institutions, falling household incomes lead to increases in high-risk operations in the forex market, binary options market, cryptocurrency market, illegal housing (buying an apartment without all the necessary documents) etc. in order to generate high revenues within a short period. For example, as of July 2, 2018, there were 71 illegal residential constructions in Kyiv (Domik.ua Encyclopedia of real estate, 2018). Information about

these illegal constructions is freely available; nevertheless, citizens invest their money in these constructions, although there exists a high chance of invested money loss. The same goes for other types of the markets mentioned above. As a result, the Ukrainian population becomes more impoverished and therefore looks for more opportunities of high risk and high profitability with assets outside of the scope of formal financial systems.

Table 2. The major consumer-related threats in operations of Ukrainian insurance companies (1 – minimum value, 5 – maximum value)

Ratio	Threats			
	Drop-in incomes of Ukrainians	High distrust of financial institutions	Low awareness of insurance products	The high price of insurance services
The average value of answers	4.56	4.23	3.63	3.65
Ranking	1	2	4	3

Sources: developed by the authors

As far as risk management is concerned, the company cannot influence the level of incomes of the population. However, the level of distrust may be reduced due to their purposeful and productive innovative activity (innovations aimed at increasing the transparency of insurance businesses, technological, etc.).

Hypothesis 4. Problems of strategic management are the most important problems arising in the internal business environment of a company.

The study found that the most critical problems related to the company's internal environment are the following: lacking a definite strategic business development plan (1st place), problems involving qualified staff (2nd place) and problems with the interaction of structural units (3rd place) (Table 3). Hence, proposed Hypothesis 4 found its evidence.

Hypothesis 5. The bare majority of insurance companies deem innovations the primary mechanism for retaining competitive positions at the insurance market.

To test Hypothesis 5, frequency analysis of respondents' answers was used and revealed that the share of respondents who agree and strongly agree with the statement that innovations act as the primary mechanism for retaining competitive positions at the insurance market totals more than 95%. The hypothesis was confirmed.

Table 3. The most critical problems in the internal business environment of Ukrainian insurance companies (1 – minimum value, 10 – maximum value)

Ratio	Problems in the internal business environment					
	Absent clear strategic plan	Problems of interaction among structural units	Staff qualification	Absent recognised competitive position	Financial difficulties	Insufficient customer behaviour insight
The average value of answers	6.86	6.75	6.80	6.28	6.39	6.36
Ranking	1	3	2	6	4	5

Sources: developed by the authors

Hypothesis 6. Innovations may produce a maximum effect for the enhancement of market positions of an insurance company in the area of development of new insurance products.

Testing of our Hypothesis 6 regarding the most efficient areas of innovation implementation has shown the priority of such major business processes as the development of new insurance products, as well as the introduction of the Internet and mobile technologies (Table 4). A proposed Hypothesis was confirmed.

Table 4. Assessment of the maximum effect of the implementation of all-type innovations in insurance companies' activities (1 – minimum value, 10 – maximum value)

Ratio	Creation of new insurance products	Implementation of the modern software in management and accounting	Usage of Internet and mobile resources	Usage of smartphone applications	Improved quality of service	Optimisation of management structure
The average value of answers	8.96	8.79	8.13	7.75	8.21	7.44
Ranking	1	2	4	5	3	6

Sources: developed by the authors

Hypothesis 7. Usage of Internet technologies and mobile technologies is the primary innovation which may influence operations of insurance companies at the Ukrainian market to a great extent.

To check Hypothesis 7, frequency analysis of respondents' answers to an open-end question was used, and answers were grouped further in 4 categories. Usage of Internet technologies and mobile technologies (43.8% of respondents' answers) headed the list, management and organisational innovations (22.9%) ranked second, development of new insurance products (20.8%) ranked third, and quality of service (12.5%) came fourth. The share of insurance companies in Ukraine which deem employment of Internet technologies and mobile technologies may influence their business dramatically is within the following range (with 0.95 confidence): from 36.6% to 51%. Hence, previously proposed Hypothesis 7 was confirmed.

Hypothesis 8. There exist no obstacles for the majority of companies in implementing fundamental innovations into operations of insurance companies at the Ukrainian insurance market.

To check Hypothesis 8, frequency analysis of respondents' answers to a particular question was used, and Hypothesis 8 was not confirmed since 53.1% respondents mentioned about existing obstacles in implementing fundamental innovations into operations of an insurance company. The share of insurance companies in Ukraine which considers the existence of obstacles in implementing fundamental innovations is within the following range (with 0.95 confidence): from 39.1% to 67.1%.

Hypothesis 9. The main obstacles for implementing fundamental innovations in the operations of insurance companies at the Ukrainian insurance market are related to scarce financial resources.

To check Hypothesis 9, frequency analysis of respondents' answers to an open-end question was used, and answers were grouped further in 4 categories. Scarce financial resources (33.1% of respondents) headed the list, unfair competition and restrictions in the legislation (both 27.8%) ranked second and third, whereas limited technical and human resources (11.1%) came fourth among obstacles for fundamental innovations.

The share of insurance companies in Ukraine which deems scarce financial resources, the primary obstacle in implementing fundamental innovations is within the following range (with 0.95 confidence): from 11.6 to 55%. The hypothesis was confirmed.

Hypothesis 10. All-kind obstacles deny implementation of all-kind innovations.

To check Hypothesis 10, all-kind innovations and obstacles were broken down into two groups. The innovations were classified as follows: management and organisational – changes in management methods and increased service quality; product and technological – a new insurance product, Internet technologies and mobile technologies. Internal obstacles are limited technical and human resources and scarce financial resources, whereas unfair competition and restrictions in the legislation present external obstacles. Cross-tabulation results are given the measure in Table 5.

Table 5. Primary innovations in activities of insurance companies and obstacles for their implementation

Primary innovation	Obstacles	
	Internal obstacles	External obstacles
Product and technological innovation	35.7%	64.3%
Management and organisational innovation	75.0%	25.0%
Total	44.4%	55.6%
Pearson Chi-Square	1.945	df1
		Asymp. Sig. 0.163

Sources: developed by the authors

Pearson Chi-Square value (1.945) derived for the above contingency Table speaks for existing significant difference between groups of obstacles for various types of innovations. Therefore, proposed Hypothesis 10 is not confirmed.

Hypothesis 11. The majority of insurance companies consider their resources the principal possible source of financing innovations.

Testing of proposed Hypothesis 11 involves a comparison of 2 possible sources of financing innovations – internal and external (the combination of borrowings and resources of partners). To test the hypothesis, frequency analysis using nonparametric binomial criterion was applied for the whole population. Findings of a performed frequency analysis made it evident that 61.2% of companies responding to this question (30 companies) mentioned that own resources account for the over half of all possible sources of financing. Binomial Test ($p=0.152$) gave no evidence that our proposed Hypothesis 11 is valid for all insurance companies in Ukraine (Table 6).

Therefore, there is no difference for insurance companies in Ukraine in using possible financing sources when both internal and external sources may be used. Hypothesis 11 was rejected.

Hypothesis 12. There exists the difference in the risks of companies depending on the following criteria: experience at the Ukrainian market (up to 15 years, more than 15 years), business orientation (B2C market and B2B market) and national affiliation of the company (Ukrainian companies and companies with full or partial foreign capital). Mann-Whitney's nonparametric criterion was used to determine the statistically significant difference in the assessment of risks.

Table 6. Binomial Test to check hypothesis on financing sources of innovations by insurance companies

Financing source	N	Observed Prop.	Test Prop.	Exact Sig. (2-tailed)
Share of own resources more than 50%	30	0.61	0.50	0.152
Share of external resources more than 50%	19	0.39		

Sources: developed by the authors

According to the criterion of work experience, the statistically significant difference is detected only for the factor «high competition» (at the level of 0.95) and is considered more significant for companies with more than 15 years of experience. In terms of business orientation, the survey showed that B2B and B2C companies are highly relevant to all risk sources, except for «limited financial resources», which is more significant for companies in the B2C market. According to the criterion for the participation of foreign capital, there was a discrepancy in assessing the significance of the factor «customer paying capacity». Ukrainian companies value the importance of this factor as a source of risk higher than companies with

foreign capital participation. In terms of the factor involving the threat to work with consumers, the difference is found that Ukrainian companies with extensive experience in the B2C market place a higher emphasis on factors associated with falling incomes and high prices for insurance services. The companies become particularly relevant for innovation to allow reducing cost and help attract new customers (which is what Internet insurance does). Thus, a proposed Hypothesis was confirmed.

Concerning the assessment of threats associated with the Internal business environment, there are no differences between companies according to these criteria. In addition to the criterion «type of market». Companies operating at the B2C market are highly appraised by factors such as the lack of a clear strategic development plan, insufficient staff qualifications, and lack of a clear competitive position.

All these threats are related to the marketing of insurance companies and need innovation in this core business process. Table 7 summarises the threats to the activities of insurance companies at the Ukrainian market and the direction of implementation and the nature of innovation.

Table 7. Factors of threats in the activity of insurance companies in the Ukrainian market and directions of implementation and character of innovations.

No.	Factors of threats	Directions of innovations	Nature of innovations
1.	High competition	Primary business processes: market analysis, development and sale of insurance services	Analysis of customer behaviour models based on outsourcing, development of new services according to identified models, the introduction of Internet insurance.
2.	Lack of a clear competitive position	Primary business processes: market analysis	Analysis of competitors and consumer motivations based on outsourcing
3.	High level of distrust in financial institutions	Primary business processes: underwriting. Subsidiary business processes: personnel recruitment, information system	Usage of insurance scoring, Internet insurance, development of efficient PR strategy
4.	Low paying capacity of customers	Primary business processes: development of services, promotion strategy, underwriting	Development of services by various level of paying capacity of customers switch to multiple segmentation strategy, the introduction of Internet insurance.
5.	Lack of a strategic development plan	Primary business processes: internal marketing. Subsidiary: business-planning personnel recruitment	Engagement of strategic business planning expert, including on outsourcing basis.
6.	Problems with highly qualified personnel	Subsidiary business processes: qualified personnel recruitment	Partnership relations with the leading universities on insurance and marketing personnel training.
7.	Problems with interaction among structural units	Primary business processes: internal marketing. Subsidiary business processes: personnel recruitment.	Internal audit, optimisation of business processes, adequate information and document interchange among units.

Sources: developed by the authors

Establishing partnerships with consulting marketing companies based on outsourcing principles for researching consumer behaviour models, developing strategic plans for development, positioning, personnel training, implementation of internal audit etc. could prove an effective way for employment of an innovation strategy. Based on research findings, outsourcing, as a strategy for managing insurance companies, involving the transfer of business processes or parts of them from the customer to the outsourcer can be a useful tool for the introduction of innovations. Given that relations with consumers account for much of threats to the activities of insurance companies in Ukraine requiring marketing management, however, in the context of insufficient staffing with such specialists, it becomes appropriate to perform the number of marketing functions based on outsourcing. In particular, this applies to the following: marketing research, diagnostics of the market situation of the company, internal audit, development of strategic development plans, etc., which is especially relevant for small and medium-sized companies and partly for large ones.

Outsourcing can also become the most effective tool for integrated IT-service of insurance companies, which is the main direction of innovation in modern conditions (in Ukraine it is used by more than a third of companies). Outsourcing in these types of activities will allow to improve some business processes, reduce costs, reduce the number of employees, etc. The companies participating in the survey consider the following innovation as primary which could strengthen their market position: companies with less than 15 years of experience at the B2B market prefer Internet and mobile technologies, whereas the companies operating more than 15 years at the B2B market choose the development of new products and Internet technologies. In general, modern Internet technologies, mobile resources and software products are, together with marketing tools, important directions for innovations. Given the high degree of consumer distrust towards insurance companies and their low paying capacity, underwriting is one of the essential business processes which requires innovations and involves risk analysis and assessment, and the calculation of tariff rates. With tariff rates transparent and precise for a consumer, confidence to activities of insurance companies will increase. In this regard, insurance scoring is one of the promising innovations in the insurer's tariff policy which is based on credit scoring and provides for usage of credit history of consumers for calculation of tariff rates. Insurance scoring in Ukraine is not regulated legislatively and is a new approach in the activities of insurance companies.

Conclusions. Findings of the conducted research permit to conclude that the insurance market in Ukraine is at its primitive state of development and has several shortcomings and contradictions. Almost all subjects of the insurance market believe that the introduction of innovations is the most effective way to strengthen the competitive advantages and development of the insurance market.

The proposed classification of innovations by types of activity and division of business processes in terms of the primary and subsidiary type allow revealing the directions of innovations used by insurance companies at the Ukrainian market. Test findings of 12 Hypotheses advanced in the course of the research suggest how insurance companies varying in such terms as market type (B2B or B2C), working experience and available foreign capital among founders may employ innovations in their activities. The vast majority of companies, regardless of their experience, business orientation or national ownership of capital, consider innovations in the fundamental business processes associated with the development of new insurance products, in particular, using IT technologies, as the most promising direction of innovation.

One of the most promising directions of innovations in the activity of insurance companies in Ukraine is the widespread introduction of Internet insurance. Internet insurance will significantly reduce the effect of market risk factors associated with the low consumer paying capacity, high tariffs for insurance services, fraud cases, distrust of the population etc. This innovation will save time on processing, sale of insurance services and expand market share through geographic diversification, reduce costs and tariffs, mitigate fraud and unfair competition. Employment of artificial neural networks, artificial intelligence, Big Data, software smartphone products etc. is another promising direction of innovations which will improve the quality of information, consulting and reference services.

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Інноваційна активність українських страхових компаній

Метою статті є визначення ролі інновацій в подоланні проблем, які виникають в діяльності страхових компаній. Фахівці страхових компаній, які працюють в умовах нестабільного ринкового середовища і високого рівня підприємницьких ризиків, потребують науково обґрунтованих рекомендацій відносно того які саме інновації здатні підвищити ефективність бізнес-процесів. Дослідження питання інноваційної діяльності страхових компаній в статті здійснено в наступній логічній послідовності: показано місце інновацій в розгортанні чотирьох промислових революцій та їх роль в сучасному страховому бізнесі (українському та закордонному) в зв'язку з його основними та допоміжними бізнес-процесами; описані проблеми які є типовими для вітчизняних страхових компаній взагалі та виокремлені фактори ризиків, які відрізняються за критерієм клієнтського ринку (B2B або B2C), досвіду діяльності та участі іноземного капіталу; запропоновані найбільш доцільні інноваційні рішення для усунення виявлених загроз в діяльності страхових компаній. В статті представлено результати вибіркового опитування 52 страхових компаній. В ході опитування перевірялися гіпотези, які стосувалися: найбільш загрозливих факторів бізнес-середовища страхових компаній; напрямків використання інновацій для розвитку бізнесу страхових компаній; відмінностей в оцінці загроз бізнес-середовища; відмінностей у можливостях і напрямках використання інновацій. Для обробки отриманих даних був використаний програмний пакет IBM SPSS. Для аналізу даних використовувались наступні прийоми: частотний розподіл змінних, крос-табуляція, непараметричне тестування змінних. Дослідження виявило, що від 51,5 до 77% страхових компаній, що працюють на українському ринку, стикаються з труднощами в роботі. Найбільш вагомими чинниками ризиків для страхових компаній є низька платоспроможність споживачів страхових послуг (1 місце), висока конкуренція (2 місце), недосконалість законодавства (3 місце). В ході дослідження виявлено, що до найбільш важливих проблем пов'язаних з внутрішнім середовищем компанії відносяться відсутність чіткого стратегічного плану розвитку бізнесу (1 місце), нестача кваліфікованого персоналу (2 місце) та проблеми зі взаємодією структурних підрозділів (3 місце). Дослідження емпірично обґрунтовує конкретні напрямки впровадження і характер інновацій, які потрібні для протидії певним видам загроз в їх діяльності. Результати проведеного дослідження можуть бути корисним для підвищення ефективності бізнес-процесів не лише українських, але і іноземних, страхових компаній, які діють в умовах високої мінливості чинників бізнес-середовища.

Ключові слова: страхові компанії, інновації, бізнес-процеси, B2C-ринок, B2B-ринок.

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