Marketing Complexes as a Mechanism for Managing the Financial Activities of Insurance Companies in Ukraine

Valentyn Dranus^{1,*}, Liubov Dranus², Inna Tsvihun³ and Kateryna Chernenok⁴

¹Department of Finance and Credit, Petro Mohyla Black Sea National University, Mykolayiv, Ukraine.

²Department of Management, Petro Mohyla Black Sea National University, Mykolaiv, Ukraine.

³Department of Accounting, Taxation and E-Business Technology, Higher Education Institution & quot;

Podilskyi State University & quot; Kamianets-Podilsky, Ukraine.

⁴Department of Finance and Credit, Petro Mohyla Black Sea National University, Mykolayiv, Ukraine.

Abstract: The purpose of the study is to analyze the market of insurance products in Ukraine, to determine the effective implementation of marketing complexes in the activities of insurance companies and their impact on the management of financial activities of insurance companies. The analysis of the insurance market in Ukraine is carried out and, taking into account the diversity of external and internal financial relations of insurers, increased competition, the mechanism of effective financial management at the micro level is proposed using world experience and taking into account domestic peculiarities. The legal framework and the mechanism of state regulation of financial services markets, the current state of the insurance market in Ukraine, the dynamics of changes in the number of insurance companies, the factors that negatively affect the activities of insurers are analyzed. For insurance companies that continue to operate, it is proposed to intensify the use of marketing mechanisms in insurance, which will allow insurance products and meet customer needs. To put this idea into life a simulation model has been developed that will achieve the appropriate level of marketing strategy and determine the most attractive alternative from a variety of alternatives to effectively manage the financial activities of the insurance company, which will ensure a positive financial activities in the long run.

Keywords: Insurance market, Insurance company management mechanisms, Competitiveness, Marketing mechanism, Marketing complexes.

INTRODUCTION

Insurance at the current stage of economic development is an important financial tool that allows socio-economic stability and financial and economic security, effective protection of economic and property interests of citizens and businesses from the manifestation of various risks. The volume of insurance transactions and financial resources circulating in the insurance market are attractive to users of these resources, investors and the state. The variety of external and internal financial relations of insurers, increased competition determines the need for highly effective financial management at the micro level using international experience and taking into account domestic characteristics. An effective tool to increase the competitiveness of insurance companies is the use of a marketing mechanism to make informed decisions aimed at adapting to changes in the market environment.

Therefore, a special place in the insurance business should be given to fast marketing, because despite the reduction of insurance companies in the insurance market of Ukraine and the intensification of competition, the demand for this type of service remains low. Under marketing we explore a set of actions of insurance services aimed at increasing the insurer's profit or maximizing the sale of insurance products by taking into account the fullest possible needs of policyholders. Marketing of insurance services is a preliminary analysis of profitability and clientele, as well as the methodology of their conquest and retention. In these definitions, consumers are studied as the object of the insurer's efforts, not the equal side of the insurance relationship. World experience shows that only equal relations between the seller and the purchase of insurance services are effective and useful. In the context of research of marketing insurance services, it is especially important both concepts and receptions by means of which mutual understanding and effective interaction of the insurer and the insured are reached, optimization of their financial and economic relations, orientation on the best providing various needs of doctors with the achievement of sufficient profitability of insurance operations for the company. The complex of insurance marketing, as well as marketing in general, includes: conducting marketing research, segmentation and positioning; creation of new or application of existing insurance services taking into account market requirements; creating an effective system of marketing and management of these products; implementation of measures to promote insurance products; implementation of communication PR-policy.

Marketing of insurance services from traditional marketing has the following features: insurance marketing analyzes various risks; state policy of the insurance business, require-

^{*}Address correspondence to this author at the Petro Mohyla Black Sea National University, Mykolaiv, Ukraine; E-mail: drval8@ukr.net

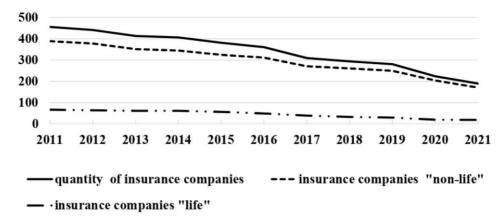


Fig. (1). Dynamics of change in the number of insurance companies in the insurance market of Ukraine in 2011-2021.

ments for the power of the insurance product (insurance activity), licensing the reliability of the regulation of the marketing will of the insurer's insurance behavior; patenting of insurance products, which leads to rapid copying of successful developments and insurance programs by competitors; it is necessary to analyze many markets and activities for effective business (a variety of types of insurance): incomplete understanding of insurance, the effectiveness of insurance protection and the mechanism of price formation by some customers. Thus, the peculiarities of marketing in insurance activities are related to the specifics of the product of this activity, government regulations and macroeconomic population. The role of marketing in insurance is extremely important - the ability to properly assess the existing market needs, coordinate their activities in accordance with them, effective promotion and marketing policies, increase analysis of your activities, anticipate further development prospects, lay an unshakable foundation for prosperity of any insurance company.

The use of marketing tools gives insurance companies the opportunity to adapt to their business activities in conditions of uncertainty, which will ensure the achievement of a positive financial result in the long run.

The current state of the insurance market of Ukraine is characterized by the lack of sufficient information about the insurance market and its individual segments, as well as the lack of insurance culture and confidence in insurance. Evidence of this is the opinion (I. Koshkalda et al., 2020) that barriers exist to the uninterrupted, efficient marketing of products, and chief among those are high prices and low level of consumer awareness about the characteristics of produce. The problem with marketing is exacerbated by the opportunistic behavior of conventional companies. This situation, in turn, reduces the level of consumer trust in products, even if the labeling requirements are fully respected.

The problem of negative attitude to insurance is complex socio-psychological and informational nature, and therefore expect its solution at the state level through the mechanism of compulsory insurance is unreasonable, so we recommend insurance companies in Ukraine to solve this problem through the introduction of insurance marketing. Given the above, the purpose of the study is to highlight the main features of the use of marketing systems in the direction of insurance and justify the need for its use.

LITERATURE REVIEW

Analysis of the Insurance Market in Ukraine

The insurance market in Ukraine began its formation in 1996, after the entry into force of the Law of Ukraine "On Insurance", which defines the place and role of insurance activities. Researchers note that the insurance industry before the global financial and economic crisis was ahead of other sectors of the economy. In particular, for the period from 2001 to 2008, the growth rate of gross insurance revenues averaged 134,4% in the insurance market (L. Chvertko, 2017). We believe that the insurance market of Ukraine has passed the stage of formation, acquired a certain level of development, but has not become a real factor of stability and its characteristics do not meet the objectives of advanced development of the Ukrainian economy and global insurance markets. This causes it to lag significantly behind in the global process of forming the global financial system. Expanding the range of financial services and the growing role of non-bank financial institutions in the investment process is an important basis for economic growth and a necessary prerequisite for the development of other sectors of the economy. However, comprehensive studies of the modern financial sector of Ukraine show that it is not yet fully in line with trends in global financial markets. After all, as the experience of economically developed countries shows, a wellestablished insurance business, development and proper functioning of non-bank credit institutions contribute to the sustainability of financial systems and the solution of insurance problems (V. Dranus, 2016). Let's analyze the dynamics of changes in the number of insurance companies, considering the indicators of table 1. The first commercial insurance companies began to be established in the 1990s (there were 7 at the end of 1990), and the intensive growth of the total number in 1991-1996 was facilitated by: creation of subsidiaries by foreign insurers in Ukraine, formation of parallel commercial insurance companies by Ukrderzhstrakh branches, creation of insurance companies with large financial and industrial structures, at the initiative of foreign investors, etc. The peak number of insurance companies was reached in 1996, when their number reached 700. However, the large number of newly created insurance companies did not mean the formation of a full-fledged insurance market. However, a significant part of these insurance companies

received income from the activities of "financial pyramids" or inflationary fluctuations. In 1997, the market saw a sharp decline in the number of insurance companies (almost 2,9 times), and a gradual increase in their number from 1998 to 2011. As of the beginning of 2011, the number of operating insurance companies was 456. In the future, there is a tendency to reduce the number of insurance companies and by mid-2021 their number was 190, which is 41,7% less than in 2011. The development of the insurance services market in Ukraine, along with the developed markets of Central and

Eastern Europe, is significantly inferior in its main characteristics. Insurance in Ukraine covers less than 10-15% of the insurance field, while in Western Europe – more than 94%. The Ukrainian insurance market is still unable to recover from the global financial and economic crisis that began in 2008 (I. Rekunenko & Yu. Vidmenko, 2019).

At the same time, according to international standards, the market of insurance services in Ukraine remains quite small in terms of activity. This is evidenced by the indicators in Table **1** (Atlas Magazine, 2022).

N⁰	Country	Turnover			
		2021	2020	2020-2021 Evolution	2021 Shares
1	United Kingdom	399 142	341 950	16.73%	21.50%
2	France	296 380	238 998	24.01%	14.86%
3	Germany	275 779	260 322	5.94%	14.86%
4	Italy	192 481	172 704	11.45%	10.37%
5	Netherlands	92 986	88 004	5.66%	5.01%
6	Spain	73 571	67 220	9.45%	3.96%
7	Ireland	64 696	49 282	31.28%	3.49%
8	Switzerland	57 794	57 081	1.25%	3.11%
9	Luxembourg	48 287	36 902	30.85%	2.60%
10	Sweden	47 955	41 469	15.64%	2.58%
	Тор 10	1 549 071	1 353 932	14.41%	82.35%
11	Denmark	45 317	39 906	13.56%	2.44%
12	Belgium	44 278	40 870	8.34%	2.39%
13	Finland	31 009	26 202	18.35%	1.67%
14	Norway	26 155	20 160	29.74%	1.41%
15	Russia	23 300	21 323	9.27%	1.26%
16	Austria	22 186	20 597	7.71%	1.20%
17	Pologne	17 065	15 511	10.02%	0.92%
18	Poland	15 885	11 359	39.85%	0.86%
19	Czech Republic	8 259	7 215	14.47%	0.44%
20	Liechtenstein	6 057	5 819	4.09%	0.33%
21	Greece	5 434	4 882	11.31%	0.29%
22	Hungary	4 337	3 865	12.21%	0.23%
23	Malta	3 482	3 221	8.10%	0.19%
24	Romania	3 175	2 710	17.16%	0.17%
25	Slovenia	2 207	2 250	-1.91%	0.12%
26	Bulgaria	1 927	1 652	16.65%	0.10%
27	Ukraine	1 913	1 676	14.14%	0.10%
28	Croatia	1 843	1 584	16.35%	0.10%

Table 1. European Insurance Market in 2021: Turnover by Country (in millions USD).

	Total Europe	1856174	1624287	14.28%	100.00%
	Rest of the market	40 283	270 355	-85.10%	2.17%
	Total	1 815 891	1 353 932	34.12%	97.83%
30	Serbia	1 214	1 065	13.99%	0.07%
29	Slovakia	1 777	1 904	-6.67%	0.10%

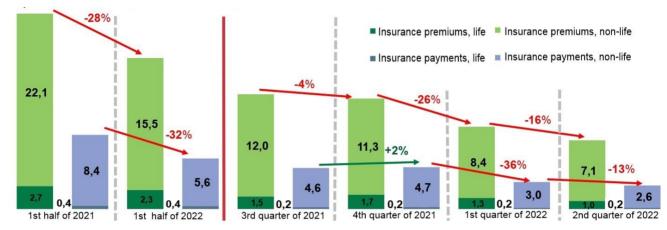


Fig. (2). Insurance premiums and insurance payments of insurance companies 2021-2022, UAH billion.

As shown in Table 1, the Ukrainian insurance market occupies only 0.1% of the structure of the insurance market in Europe, which indicates the presence of negative trends, the insufficient development of the insurance services market in Ukraine leads to a decrease in the welfare of the population, increases the costs of economic entities for compensation of losses, increases the burden on the expenditure part of the budget to cover losses caused to society, reduces socio-economic stability in the country, which, in turn, negatively affects the financial system and economic security of the country, leads to the aggravation of the problems of investment resources, and as a result – a reduction in investment activity.

Also, a confirmation of the negative manifestation of trends in the insurance market of Ukraine is its reduction by a third, if we compare the performance indicators of insurance companies for 2021-2022.

Total premiums signed in the first half of 2022 compared to the first half of 2021 decreased by almost a third (-28%) and amounted to UAH 17.8 billion – at the same time, the volume reduction took place in the non-life segment (-29%), the volume of life insurance premiums decreased by half as much (-15%). Volumes of paid insurance indemnities in the first half of this year also fell commensurately in the non-life segment (-32%). The level of payments was 34% and did not change. The dynamics of the indicators for the last 4 quarters shows that the largest decline in the volume of activity occurred at the end of the 1st quarter of 2022. In the II quarter, the decline continued, but it was less rapid.

Today, the development of the insurance market is constrained by a number of factors, in particular, some insurance companies have problems with solvency and liquidity, do not have a clear business model, the level of risk management and corporate governance is low. All this makes the market opaque and uncompetitive. During 2013-2018, some large insurance groups, including AEGON, AXA, SEB, AIG and HDI, withdrew from Ukraine, including due to unfair competition in the market. The above-mentioned systemic problems in the insurance market in Ukraine are caused primarily by inadequate legal regulation, as well as imperfect regulatory policy and lack of proper supervision over its implementation.

Ukraine is the fifth country in Europe in terms of population, so it is necessary to search for ways to increase the insurance market to a higher level, agree on the rules for regulating insurance relations, and eliminate obstacles to the free flow of financial resources. Such a trend should ensure positive changes in the real sector of the economy of Ukraine, expansion of the infrastructure of insurance markets, and stimulate the emergence of innovative insurance products. Financial security in the insurance market is a driver of economic growth and a key element of the system of economic security of the state and financial protection of citizens. But the lack of a perfect legal framework, transparency of the insurance market for the population, low profitability of certain types of insurance and other urgent problems that have accumulated in the financial sector of the national economy hinder the effective development of the insurance market of Ukraine.

State regulation of the insurance market in Ukraine and identification of the reasons influencing the decrease in the number of insurance companies.

The function of the state, which regulates the insurance industry, can take various forms: the adoption of legislation governing it; establishment of types of compulsory insurance; conducting tax policy; establishing benefits for insurance companies to stimulate their activities; creation of a special legal mechanism that provides supervision over the functioning of insurance companies, etc. (V. Dranus et al., 2021). In September 2019, the Law of Ukraine "On Amendments to Certain Legislative Acts Concerning the Improvement of Functions on State Regulation of Financial Services Markets" (the so-called "Split" Law) was adopted, according to which the National Bank of Ukraine became a regulator and supervisor body in the insurance market on July 1, 2020 in order to form a solvent, stable, competitive insurance market in Ukraine with adequate protection of the rights of consumers of insurance services. To achieve this goal, the National Bank introduces a new model of insurance market regulation, which takes into account the provisions of EU directives, global practices of regulation and supervision of the insurance and reinsurance market, as well as the peculiarities of the insurance market in Ukraine (National Bank of Ukraine, 2020). After the split, insurance companies, credit unions, financial and factoring companies, credit bureaus, pawnshops and lessors came under the control of the National Bank of Ukraine. As of January 1, 2020, 224 insurance companies were registered in the state register of financial institutions, and as of July 1, 2021, 190 remained. There are several reasons for the decrease in the number of insurance companies. The main ones are solvency standards in accordance with the requirements of Solvency II solvency standards, which consider two aspects: development of minimum and regulatory capital requirements, which came into force in 2018, but after transitional periods and delays began to be regulated after the "split", when insurance the market was subordinated to the National Bank of Ukraine. Insurance companies had several years to prepare for inspections, sell and decide to leave the market. Some players, mostly small companies, perceived these standards as unrealistic for themselves and began to leave the market. According to the current method of reservation, almost all insurers are in a situation where the calculation of the formulas in the method leads to a significant re-reservation. For many market players, the requirement to have at least UAH 30 million in capital (for life insurance companies - UAH 45 million), introduced in the midst of the coronavirus crisis, has become an insurmountable barrier. After all, every fourth company, especially in the regions, had a turnover of up to UAH 50 million per year. For such insurers, which made payments of UAH 10-20 million per year, and at the same time had UAH 25-30 million of total reserve and solvency margin, it was necessary to provide even more than UAH 30 million of equity. For companies with a turnover of hundreds of millions or billions of hryvnia, this requirement did not cause problems. For small insurers, it makes no economic sense to operate with such requirements, when the owners need to create cash reserves that are many times higher than not only annual payments, but also annual payments. And small companies began to close. Some of them have been operating for decades and have been forced to issue licenses and exit the market (L. Sleptsova, 2021).

Companies went for other reasons: those that provided virtually no financial services, as well as companies that violated regulations but did not wait for National Bank of Ukraine sanctions and left the market voluntarily to preserve the business reputation of their managers and owners. Compulsory withdrawal from the market by revoking a license as a measure of influence by the regulator has negative consequences for the management of such companies. For example, out of ten insurance companies whose licenses were suspended for violating solvency standards in the second half of 2020, seven applied for voluntary withdrawal from the market. Three violating companies have not yet provided the National Bank of Ukraine with information on the elimination of violations (V. Rudenko 2021). Thus, the perception of new requirements and the new regulator is diametrically opposed, small insurance companies, which have no claims to the activities of customers, have cooperated with them for many years in their segment of the insurance market, consider the requirements for insurers too high, because it benefits large players. that regional and small insurance companies will not be able to withstand such a load. Other market participants are not inclined to see the cause of what is happening only in "unbearable" requirements and consider the processes taking place as natural cleansing. The problem is not in the regulations, but in the fact that companies have chosen a short-sighted strategy and have not calculated their work in the new regulatory environment. The National Bank of Ukraine, for its part, should only control the quality of companies' work. Guilt for leaving the market is a matter of management. In addition, one of the reasons is considered to be the underestimation of the market, because insurance is a very expensive activity that requires significant capital for development, so to work in the insurance market with a minimum share capital will not work (L. Sleptsova, 2021). Thus, in pursuance of the Law on Split, the National Bank has taken over the functions of the regulator of the non-banking financial services market, including the insurance market, which is heterogeneous and has a rather risky segment, as insurers attract funds from businesses and individuals, much of the market is inactive. The fact that the reform coincided with the COVID-19 pandemic only exacerbated the problems. How do participants in the domestic insurance market survive these turbulences, how to secure their activities and maintain and increase the number of their customers in such conditions?

Organization of Marketing Activities in Insurance Companies.

Insurance companies carry out their activities by carrying out a set of measures such as: underwriting, risk analysis, acceptance of insurance risks, actuarial calculations, fulfillment of obligations to shareholders, customers, own staff, so a positive result of financial and economic activities is achieved by effectively management of the whole set of measures of the insurer. Effective management is a process aimed at improving the quality of the insurance company through specific methods and tools. The overall management efficiency of the insurance company consists of the management efficiency of individual subsystems: finance, marketing, organizational structure and others. Each of these subsystems has an internal structure aimed at achieving certain goals and objectives within the insurance company, which together serves the purpose of improving the efficiency of management and efficiency of the insurer (A. Romenska, 2011).

Thus, the effectiveness of the management of the insurance company depends on the peculiarities of the mechanisms of the insurance company, as processes of object management using levers based on management methods. In each mecha-

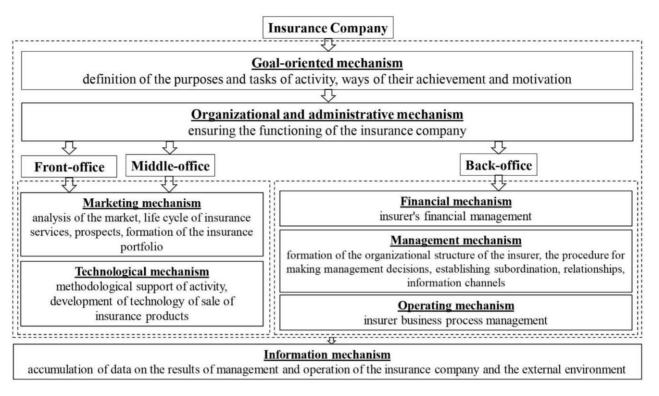


Fig. (3). The scheme of interrelations of mechanisms of management of the insurance company.

nism of the insurance company there are generally accepted methods: analysis, planning, control and regulation. The levers are formed in accordance with the specific object of control, its processes, and determine the methods of influence. In addition, the mechanism includes the environment of the object, which sets the conditions for the implementation of management policy. The management mechanisms of the insurance company are shown in Fig. (2). Thus, the insurance company consists of a number of mechanisms that on the one hand are separated from each other and perform separate functions, but on the other hand, interconnected, changes in one mechanism lead to the reflection of these transformations in another, as they are part of one whole (A. Romenska, 2011). At the current stage of development of the insurance market in Ukraine, taking into account the above problems, insurance companies that continue to operate, there is a need to find new principles for managing the company, in particular, we propose to intensify the use of marketing mechanism in insurance to increase sales of insurance products and customer satisfaction.

The marketing mechanism is a set of marketing tools, a set of which the insurance organization uses to achieve the desired changes in the parameters of the target market. The better the marketing complex is developed in the insurance organization, the more effective its activity will be. With the help of the marketing mechanism there is a constant search for new markets, potential policyholders, development of new types of insurance services, which will allow the insurer to effectively manage the companies' finances (V. Furman et al., 2008).

Thus, the general concept of marketing complex or marketing mix means a system of tools, methods, techniques, approaches to insurance services, prices, promotion, distribution channels, the use of which aims to create competitive advantages in the target segment and achieve market goals. The concept of "marketing complex" was first introduced into marketing theory by Neil Borden in 1964, a professor at Harvard Business School. He developed the so-called concept of "4P" (A. Starostina, 2003). Using this concept, Neil Borden wanted to systematize and describe all the marketing tools needed to create a marketing plan for the companies' product development.

The marketing complex in the classical sense is a combination of four components (model 4P): product (Product), price (Price), distribution or place (Place) and methods of promotion (Promotion), the first model "4P", in its modern form was published E. J. McCarthy (E. J. McCarthy & D.C. Marschner, 1972), later in the popularization of this approach made a significant contribution to P. Kotler and G. Armstrong (P. Kotler et al., 2014).

Some economic schools believe that it is necessary to introduce additional elements into the classical model of the marketing complex, such as: people; service delivery processes; (Process); physical characteristics, etc. The components of the marketing complex are tactical marketing tools, and recently the basic concept of "4P" has been expanded to "7P" and even to "12P + 4A".

The use of marketing models will allow you to create and present to the customer an insurance product so that the benefits associated with its acquisition can outweigh in the minds of customers the feeling of discomfort that arises from having to pay an insurance premium. Therefore, the price of insurance services set by the insurer should be interrelated with the marketing efforts spent on the promotion of this insurance product and the emergence of interest and need for

Table 2. Components of Modern Var	ieties of Marketing.
-----------------------------------	----------------------

Model name	Components		Authors
Classic marketing mix 4 P		Product Promotion Price Place	(E. J. McCarthy & D.C. Marschner, 1972)
5 P	4 P + Packaging		(J. T. Russell & W. R. Lane, 1996)
5 P	4 P + Perception		(K. E. Moller, 2006)
6 P	4 P +	Public opinion Politics	(P. Kotler et al., 2014)
7 P	4 P +	People – personnel Process – sales process Physical Evidence, furnishings, corporate identity	(I.Ellwood, 2014)
8 P	7 P +	Pace	(L.Tvede & P.Ohnemus, 2001)
12 P	8 P +	Permision Paradigm Pass along Practice	(<u>S. Godin</u> , 2018)
12 P + 4 A	12 P +	Adressability Accoutability Affordability Accessibility	(C.Martin &S.Rapp, 2001)
4 C	Customer value, needs a Cost Convenience Communication	nd wants	(R.F. Lauterborn, 1993)
4 D	Data base management Strategic design Direct marketing Differentiation		(A. Shromnik, 2005)
2 P +2 C +3 S	Personalization Privacy Customer Service Community Site Security Sales Promotion		(O.Otlacan, 2005)

it, because the clients' consent to pay the insurance premium depends largely on how the insurer was able to detect the real needs of policyholders and link them to their insurance product. We offer for implementation in the practice of insurance company's 6C model of marketing technologies, which corresponds well to the intangible sphere of activity, well reflects the specifics of services provided and can serve as a basis for forming a comprehensive marketing policy, as it includes key components.

The marketing technology landscape is big, broad, and deep. So many different kinds of solutions fall under that umbrella, and they do not always fit into nice, neat categories.

This contributes to the confusion that many marketers feel around martech. It's generally not clear what the taxonomy

of the solution space is, which makes it difficult to break it down into smaller, more manageable chunks of capabilities.

A good taxonomy isn't just about vendor attributes, but also helps illuminate where different solutions fit in a marketer's organization, the kinds of capabilities they enable, and the shared DNA in the practices that evolve around them.

The 6 C's Model for Organizing Marketing Technology organizes marketing technologies into 6 domains that just happen to all start with the letter C:

- Customers all the data about customers/prosects in our universe
- Content all the content we produce and distribute in all channels

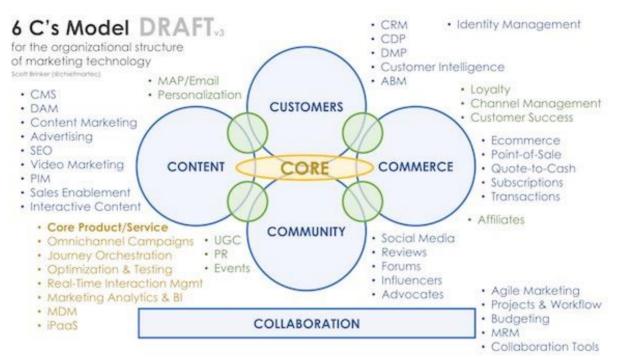


Fig. (4). Model of organization of chaos of marketing technologies.

- Community interactions with customers as a group, e.g., social media
- Commerce capabilities to directly sell our products and services
- CORE our product/service and campaigns/data that cross all of marketing
- Collaboration the tools we use for collaborating inside marketing (S. Brinker, 2017)

We mapped common "categories" of martech products (e.g., the alphabet soup of CMS, DAM, CRM, CDP, ABM, MDM, SEO, etc.) into these six domains to illustrate how see these as clusters of related technologies. But it's important to emphasize that what really gives meaning to these domains is the shared practices and organizational capabilities that tend to blossom within each of them. We noted a few of the interesting intersections, such as between content and customers, which is where, most marketing automation, email marketing, and personalization solutions operate.

We think there is different DNA in most organizations for how content assets, customer data, and community interactions are managed. And while breaking down silos – or at least spanning them or rearranging them for better common alignment – is important, there's still unique skills, dynamics, and culture in each of these domains that are valuable to understand and nurture.

The heart of the core has to be your own product or service, of course, and that is the single biggest piece of the equation. But other full-span coordinating mechanisms, we think, benefit from leveraging the deep strengths of the other domains instead of overshadowing them with too heavy of a hand.

With a few tweaks and improvements, this model be the start of something useful for insurance company.

Another problem with the organization of marketing activities in insurance companies is the lack of proper interaction between departments. In order to ensure mobility, flexibility, ability to adapt and respond in a timely manner to changes in the external environment, insurance companies must ensure a comprehensive and timely transformation of internal processes to solve problems. An important stage of strategic planning is the formation of effective marketing strategies that will allow the insurance company to achieve a strategic goal. Changing environmental factors, unexpected and frequent changes in socio-economic processes, increasing competition in the insurance market quite complicate the process of forming the marketing strategy of the insurance organization. Marketing strategy is a system of actions aimed at achieving marketing goals in target markets (N. Kuleshova, 2007). Marketing strategies should be:

1) clearly stated, i.e. the purpose and objectives of the marketing strategy must be clearly and unambiguously defined;

2) specific, i.e. aimed at solving a specific task and achieving the marketing goal;

3) consistent, i.e. mutually consistent with corporate goals;

4) reasonable, i.e. to have a scientific basis for their formation and implementation;

5) rational, i.e. the costs associated with the implementation of the strategy must be justified by the expected result;

6) focused on sustainable results by creating special value for consumers and building long-term relationships with them;

7) flexible and adaptive, i.e. to ensure timely adaptation of the enterprise to a dynamic environment.

The successful financial activity of an insurance company depends on the efficient use of available resources and the

ability to adapt in a timely manner to changes in the environment. Therefore, when developing a marketing strategy, it is necessary to analyze the external and internal environment and take into account the potential of the insurance company.

METHODOLOGY

Taking into account the need to ensure the relationship between all information processes to build a functional model of information support of the marketing mechanism in the activities of the insurance company, we propose the use in practice of the methodology IDEF0. IDEF0 is a methodology for graphical description of systems and processes of the organization as a set of interdependent functions. It allows you to explore the functions of the organization without linking them to the objects that ensure their implementation. In the IDEF0 standard, the input is used to show objects - information and material flows that undergo changes during the implementation of the business process. Using IDEF0 mechanisms, you can display the tools and resources with which the business process is implemented (e.g., hardware, people, information systems, etc.) The main elements of the chart in the IDEF0 notation are:

• blocks, in the form of which processes, functions, operations, actions are presented (depending on the degree of detail);

• arrows, in the form of which the diagram shows the information and material resources associated with the functions.

The formal task of forming the marketing strategy of the insurance company will be presented as follows:

 $S^* = \arg \max \mathbf{R}(\mathbf{s})$

$$s \in S(P((F^{M,N,B}(X^{M,N,B}))), (1)$$

where,

S* - the optimal marketing strategy;

 $X^{M,N,B}$ - a set of primary factors formed as a result of preliminary analysis of factors of the marketing environment;

 $F^{M,N,B}$ - a set of secondary factors formed as a result of processing the primary factors of the macroenvironment, immediate environment and internal environment;

 X^{M} - macroenvironmental factors, $X \in X^{M,N,B}$

 X^N - factors of the immediate environment, $X \in X^{M,N,B}$

 X^{B} - factors of the internal environment, $X \in X^{M,N,B}$

P - vector of marketing goals;

R - indicators of the results of the analysis of primary and secondary factors of the macroenvironment, immediate environment and internal environment;

S - is a set of alternative strategies.

The marketing strategy of the insurance company is an important tool for implementing an effective policy of its development. The right choice of marketing strategy allows you to increase the efficiency of insurance products, increase profits, improve market position. Strategic marketing has a number of special features, of which it is necessary to highlight the focus on the long term and constant and systematic analysis of market needs. This analysis is a function that leads to the development of effective insurance products designed for specific groups of customers and which have properties that distinguish them from products that competitors have and provide a lasting competitive advantage.

Based on the study of theoretical aspects of the marketing mechanism (A. Balabanits, 2009), (N. Kuleshova, 2012) and (P. W. Farris et al., 2006) systematized quantitative indicators that allow to assess the effectiveness of the chosen marketing strategy.

Evaluation of the implementation of marketing strategy should be accompanied by the calculation of absolute and relative indicators. It is worth comparing the growth rate of sales costs with the growth rate of net profit, calculate the share of marketing costs in the total costs of the insurance company and so on. We consider expedient efficiency of realization of marketing strategies to measure the set of indicators considered in table **3**.

 Table 3. Indicators for Evaluating the Effectiveness of the Marketing Strategy of the Insurance Company.

Indicator	Characteristics of the Indicator	Calculation Formula
Coefficient marketing costs	Determines activity marketing activi- ties	$K_{MB} = \frac{\sum_{i=1}^{U} Z_i}{V_n^U}$ Zi – costs of marketing activities U, thousand UAH; U - the number of marketing activities; V_n^U - volume of insurance services provided, taking into account marketing activities U.
Coefficient of elasticity marketing costs	Allows to estimate influence of size of marketing expenses on change of volumes implementation of insurance services. If $Ke < 1$, it is advisable to stop investing in advertising	$Ke = \frac{\Delta V_n}{\Delta Z_u}$ ΔV_n - increase in the volume of insurance services provided due to marketing activities U; ΔZ_U - increase in marketing costs, thousand UAH.

Profit in counting on one involved buyer, thousand UAH	Determines revenue additional profit at the expense of one involved con- sumer of the insurance product due to the implemented marketing activities	$Pc = \frac{\Delta BH}{\Delta C_b}$ $\Delta BH \text{ - increase in net profit, thousand UAH;}$ $\Delta Cb - increase in the number of customers who purchased insurance products of the insurer b due to marketing activities, persons$
Net profitability insur- ance services,%	Characterizes profitability the main activity of the insurer	$R_{cn} = \frac{BH}{PE} \times 100\%$ BH – net income from the sale of insurance services, thousand UAH; PE – profit from the sale of insurance services, thousand UAH.
Growth rate provided insurance services,%	Characterizes the growth of insurance services provided by marketing activ- ities U	$T = \frac{(V_n^U - V_b)}{V_b} \times 100\%$ V_b - the value of the volume of insurance services provided without taking into account marketing measures, thousand UAH; V_n^U - the value of the volume of insurance services provided, taking into account marketing measures, thousand UAH
Return on investment in marketing,%	Characterizes efficiency marketing costs and increase in net profit by investing each additional currency in marketing activities	$R_{BM} = \frac{\Delta BH}{\Delta Z_U} \times 100\%$ $\Delta BH \text{ - increase in net profit, thousand UAH;}$ $\Delta Z_U \text{ - increase in marketing costs, thousand UAH.}$

RESULTS

Using the IDEF0 methodology and elaborating the authors' research (A. Shromnik, 2005), (K. E. Moller, 2006) and (K. Zhadko & D. Samoylenko, 2020), an integrated functional model of information support of marketing activities has been developed (Fig. 4), which takes into account the relationship between the information processes of the insurance organization.

It's practical use will help streamline the marketing activities of the insurer, provide all its functional units with timely and complete information necessary for effective marketing decisions. The use of the model will allow a more detailed analysis of the environment of its operation, to determine the place of the marketing mechanism in the overall structure of business processes of the insurance company. An important component of the process of forming the marketing strategy of the insurance company is the evaluation of its effectiveness, which is carried out at the last stage on the basis of the results of the analysis of the marketing environment.

The main purpose of this stage is to determine the effective implementation option and choose an effective marketing strategy. Systematized by the authors on the basis of scientific research (A. Balabanits, 2009), (N. Kuleshova, 2012) and (P. W. Farris et al., 2006) a simulation model has been

developed that allows to take into account the specifics of the insurance company's activity and on the basis of modeling the parameters of the marketing strategy to determine various options for its implementation.

The main structure of the simulation model (Fig. 5) allows to obtain the values of the main indicators of the competitive position of the insurer (module 4) taking into account the influence of the external environment (module 3) and the main factors forming the own volume of insurance services (module 2); to calculate the main marketing indicators of the insurance company (module 8). Module 1 – contains marketing activities aimed at attracting additional consumers of insurance services, based on the implementation of module 5 is the calculation of the market share of major competitors, in module 7 is formed net profit of the insurance company.

Based on the calculation of indicators shown in table 3, the value of the market shares of the insurance company and comparison with its competitors, a management decision is made to adopt the most effective option for implementing a marketing strategy. Based on this, the optimization model of the choice of marketing strategy will be presented in the form of:

(2)

where,

$$R(s) = (Z(s), Ke(s), Pc(S), R_{IS}(s), T(s), R_{IM}(s), BH(s), RCH(s)) \rightarrow \frac{max}{s \in S(P)}$$

 $(Z(s) > 0, Ke(s) > 0, Pc(s) > 0, R_{IS}(s) > 0, T(s) > 0, R_{IM}(s) > 0, BH(s) > 0, RCH(s) > RCH^*$

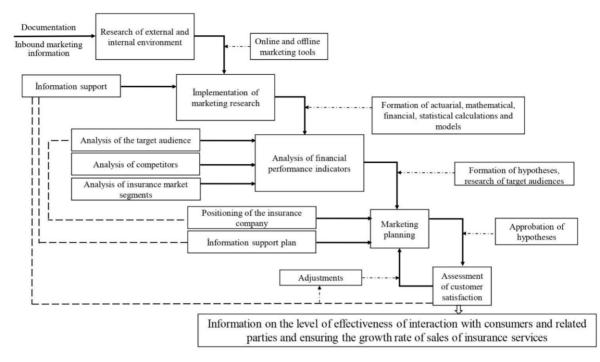


Fig. (5). Integrated functional model of information support of the insurers' marketing complex.

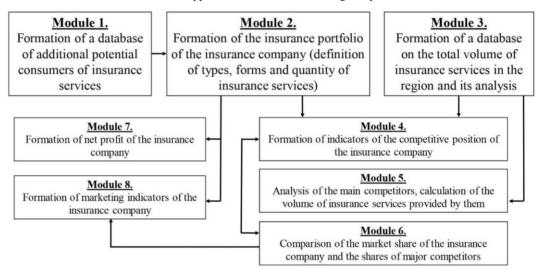


Fig. (6). The main modules of the simulation model of marketing strategy implementation.

R – is a vector criterion for the effectiveness of marketing strategy;

- Z coefficient of marketing costs;
- K_e coefficient of elasticity of marketing costs;
- P_c profit per one involved buyer, thousand UAH;
- R_{IS} net profitability of services,%;
- T- growth rate of provided insurance services,%;
- R_{IM} return on investment in marketing,%;
- *BH* net profit, thousand UAH;
- RCH market share of the insurer,%;
- RCH^* market share of main competitors,%;

- P vector of marketing goals;
- S is a set of alternative strategies.

We believe that the implementation of model (2) through simulation will achieve the appropriate level of effectiveness of marketing strategy and determine from a variable set of alternatives the most attractive option for its implementation to effectively manage the financial activities of the insurance company, which will ensure a positive financial result in the long run.

CONCLUSIONS

Given the current level of development of the insurance market of Ukraine and its lack of competitiveness, including due to restraining factors (problems with solvency and liquidity, lack of a clear business model, low level of risk management, etc.) based on the experience of economically developed countries, we consider it appropriate apply marketing methods as tools for managing the financial activities of insurers. Applying a set of marketing tools, a set of which the insurance company uses to achieve the desired changes in the parameters of the target market, insurers will be able to increase the efficiency of their activities by helping to find new markets, potential policyholders, develop new types of insurance services. The use of marketing models will create and present to the client an insurance product so that the benefits associated with its acquisition could outweigh in the minds of customers the feeling of discomfort arising from the fact that you have to pay an insurance premium. organization of marketing technologies, which corresponds well to the intangible sphere of activity, well reflects the specifics of the services provided and can serve as a basis for the formation of a comprehensive marketing policy, as it includes the main components.

Eliminating the above-mentioned problems and minimizing their negative impact due to the implementation of the mechanism proposed by the authors will make it possible to develop the market of insurance services, which in the conditions of economic and political threats and an increase in the number of challenges and threats can play a stabilizing role and stimulate the development of the country, financial market, national economy in order to develop and maintain a solvent, financially stable, competitive and stable insurance market, which will ensure proper protection of consumer rights and provide insurance services and products that meet the needs of citizens and the state.

Thus, the implementation of the model through simulation will achieve the appropriate level of efficiency and a positive financial result in the long run.

CONFLICT OF INTEREST

The authors declare no potential conflict of interest regarding the publication of this work. In addition, the ethical issues including plagiarism, informed consent, misconduct, data fabrication and, or falsification, double publication and, or submission, and redundancy have been completely witnessed by the authors.

FUNDING

The author(s) received no financial support for the research, authorship, and/or publication of this article.

REFERENCES

- Armstrong, G., Adam, S., Denize, S. & Kotler, P. (2014). Principles of marketing. Pearson Australia.
- Balabanits A. (2009) A ground of mechanism of measuring of effectiveness of marketing co-operation of enterprise is with a target market. *Trade and market of Ukraine. No 28.* Available at: http://www.nbuv.gov.ua/portal/Soc_Gum/Tiru/2009_28_3/index.ht m
- Bazilevich V. (2014) Insurance services. Kyiv:Logos (in Ukrainian).
- Brinker S. (2017) A proposed model for organizing the chaos of marketing technology. Available at:

https://chiefmartec.com/2017/05/proposed-model-organizingchaos-marketing-technology/

- Chvertko L. (2017) Progress of life-insurance trends are in Ukraine in the conditions of economic instability. Proceedings of the Steady development: economic, social, ecological and political to composition (Ukraine, Lviv, 2017) pp.116-121.
- Dranus V. (2016) Analysis of current market risk insurance in Ukraine agricultural production and its prospects. *Electronic scientific publication «Global and National Problems of Economy»*. No 11, pp.686-692. Available at: http://global-national.in.ua/issue-11-2016
- Dranus V., Dranus L. & Prokopyshyn O. (2021). Foreign Experience Analisis of Risk Management in Insurance of Agricultural Production. *Modern Economics*, 27(2021), 42-48. DOI: https://doi.org/10.31521/modecon.V27(2021)-06.
- Ellwood I. (2014) Marketing for Growth: The Role of Marketers in Driving Revenues and Profits (Economist Books).
- Farris, P. W., Bendle N.T., Pfeifer P.E. & Reibstein D.J. (2006) Marketing metrics: 50+ metrics every executive should master. Upper Saddle River, N.J: Wharton School Pub.
- Furman V., Filonyuk O., Nikolenko M. & Baranovskiy O. (2008) Strategic management an insurance company. Kyiv:KNEU (in Ukrainian).
- Gamankova O. (2009) Informative defects of research of degree of monopolization of market of insurance services of Ukraine. *Issues of the day of economy*. No 10, pp. 80–87.
- Godin S. (2018) This is marketing. New York : Portfolio/Penguin.
- Gurbich O. and Maksimchuk O. (2021). Unbank market quickly made up leeway then COVID-19 crises. Available at:https://www.ukrinform.ua/rubric-economy/3252463-olgagurbicta-olgamaksimcuk-direktorinebankivskih-departamentivnbu.html
- Koshkalda I., Bezuhla L., Nihmatova O. & Ilchenko T. (2020) Brand as a marketing tool for growth in organic sales: Evidence from Ukraine. *International Journal of Technology Management & Sustainable Development.* Vol: 19, № 3, pp.297-316. Available at: https://www.ingentaconnect.com/contentone/intellect/tmsd/2020/00 000019/00000003/art00004
- Kuleshova N. (2007) Marketing strategy as instrument of effective activity of enterprise. *Economy: problems of theory and practice:Collection* of scientific works. Vol. 230, pp. 131-142.
- Kuleshova N. (2012) Model of authentication of competition position of tourist enterprises (on the example of the Kharkiv area). Announcer Ternopil National Economy University. No 2, pp.121-129.
- Marschner D.C. and McCarthy E. J. (1972) Basic Marketing: A Managerial Approach. Journal of Marketing. Vol.1. Doi:10.2307/1250877
- Martin C. and Rapp S. (2001) Max-e-Marketing in the Net Future. London : McGraw-Hill.
- Mogilova A. and Dmitriev V. (2016) Marketing activity: features of exit of enterprise on an international level. *Scientific announcer Uzhhorod national university. Series: International economic relations and world economy.* Vol. 6, part 2, pp.108-111.
- Moller K. E. (2006) Comment on the marketing mix revisited: towards the 21th century marketing by E. Constantinides. *Journal of Marketing Management*. Vol. 22 (3), pp. 439–450.
- Official site of the Atlas Magazine insurance news. https://www.atlasmag.net/en/article/european-insurance-market-in-2019-turnoverby-country Official site of the National Bank of Ukraine (2021) A white-book the "Future adjusting of market of insurance". Available at: https://bank.gov.ua/ua/news/all/bila-kniga-maybutnyeregulyuvannya-rinku-strahuvannya
- Official site of the National Bank of Ukraine (2022) Results of analysis of accounting of insurers are for 2022. Available at: https://bank.gov.ua/
- Osadets S. (2002) Insurance. Kyiv:KNEU (in Ukrainian).
- Otlacan O. (2005) E-Marketing Strategy: 7 Dimensions to Consider (The E-Marketing Mix).
- Rekunenko I. and Vidmenko Yu. (2019) Insurance market development is in the conditions of changeability of economic environment of Ukraine. *Market infrastructure*. No 29, pp.484-490. Available at: http://webcache.googleusercontent.com/search?q=cache:x65qGs0rs IMJ:www.market-

infr.od.ua/journals/2019/29_2019_ukr/77.pdf+&cd=11&hl=uk&ct= clnk&gl=ua&client=firefox-b-d

Romenska A. (2011) Mechanisms of effective management an insurance company. *Economic analysis*. No 8, part 1, pp.307-311. Available at: https://econa.at.ua > Vypusk_8 > romenska

Statistics of insurance market of Ukraine (2021). Available at:

Tereschenko T. (2013) Insurance marketing. Dnipropetrovsk: state financial

Tvede L. and Ohnemus P. (2001) Marketing Strategies for the New Econo-

my. Chichester, West Sussex, England: John Wiley & Sons.

Zhadko K. and Samoylenko D. (2020) Functional model of the informative

providing of marketing activity of trade enterprise. Innovative

Vovchak O. (2005) Insurance. Lviv:Noviy Svit (in Ukrainian).

http://forinsurer.com/stat.

economy. No 5-6, pp.58-64.

academy (in Russian).

- Rudenko V. (2021) Year for two: as unbank establishments survived under national Bank. Available at: https://finclub.net/ua/analytics/rik-zadva-iak-nebanky-vyzhyly-pid-natsbankom.html
- Russell J. T. and Lane W. R. (1996) Kleppner's advertising procedure. Needham Heights, MA : Simon & Schuster Custom Pub.
- Schullz D.E., Tannenbaum S.I. & Lauterborn R.F. (1993) Integrated Marketing Communications. NTC Business Books, a division of NTC Publishing Group.
- Shromnik A. (2005) Territorial marketing: problems of forming of marketing strategy of cities and regions. Ternopyl:TICIT (in Ukrainian).
- Sleptsova L. (2021) Cleaning began at the insurance market. Available at: https://mind.ua/publications/20228297-na-strahovomu-rinkurozpochalasya-chistka

Starostina A. (2003) Marketing. Kyiv:Znannya-Pres (in Ukrainian).

Received: Nov 14, 2022

Revised: Nov 25, 2022

Accepted: Dec 27, 2022

Copyright © 2022- All Rights Reserved This is an open-access article.