

INFLUENCE OF UNIT ECONOMICS ON THE DEVELOPMENT OF INSURANCE MARKETING STRATEGIES

Olga Vladislavovna Zhukova, Russian State University of Physical Culture, Sports, Youth and Tourism

Alexandra Sergeevna Ermolaeva, Financial University under the Government of the Russia Federation

Natalia Borisovna Shchegoleva, Moscow State Institute of International Relations (MGIMO University)

Vladimir Dmitriyevich Sekerin, Moscow Polytechnic University

ABSTRACT

Insurance marketing plays a central role in the sales system of insurance products as it is tailored to suit the needs of customers, i. e., policyholders, while maximising the profits of the insurer. The goal set by insurance companies comes down to a three-pronged task of attracting the customer of insurance services at minimum cost, providing that the policyholder would obtain insurance guarantees assured by the policy and would return to the company again. In other words, unit economics for the insurer implies that the level of costs per customer (policyholder) to promote insurance products in the insurance market should not exceed the insurer's revenues. In this case, a unit is a customer (policyholder), but it can also be an insurance product. Accordingly, an Insurance marketing strategy would thus be tailored to promote the product, and budgeting by the methods of unit economics would be accomplished per product (insurance policy). The findings of this research are laid out as proposals based on quantitative evidence for developing modern strategies of insurance marketing and arranging insurers' operations in the market context.

Keywords: Insurance Business, Unit Economics, Financial Analysis, Insurance Policy, Insurance Products.

INTRODUCTION

The insurance business deals with a whole range of social functions, primarily ensuring social and insurance stability in the community. Insurance is governed by federal laws in Russia (Supreme Soviet of the Russian Federation, 1992).

In this paper, we seek to emphasise proposals relating to insurance marketing with a focus on overcoming the specific contradictions.

Openness is a beneficial factor in winning customers' trust, however, it is worthwhile to observe the front-end vs. back-end principle originally coming from software development. The former notion constitutes the idea that openness is about the information on the monitor, which should be clearly and accessibly explained to the customer. The latter refers to whatever is hidden from the customer and pertains to inner work. It specifically includes insurers' marketing strategies or, in this context, insurance marketing strategies.

The method of unit economics helps to track and forecast the influence of marketing decisions on the end output and to model management accounting based on financial analysis (Prokhorova, 2020; Steinmann, n.d.).

LITERATURE REVIEW

Unit economics as a science is far from well-developed yet, as there is no sufficient level of practice yet in related fields, even though everything it offers, i. e., terminologies, formulas, applications, is original, deeply scientific and scalable.

Out of the multiple definitions, we focus on the classical one:

“Unit economics is a method of economic modeling used to determine the profitability of a business model, by assessing the profitability of a unit of goods or one customer. A business can only be successful if a single unit of product or service is profitable.” (Minin, 2018).

“The methods of unit economics are useful not only for internet companies to calculate the profitability of the business model but also for advertising campaigns for modeling their economic outcomes as they are analysed and managed,” Minin writes. “and in budgeting for marketing strategies,” we would add.

While we observe that the insurance business approaches the costs of advertising campaigns as fixed costs, we would propose a hypothesis that unit economics as a method of financial analysis and management accounting can be fully applicable in the insurance business (Filippov, 2020).

Probably, more than a couple of insurance companies have considered proposals of their managers to reorient management accounting under the umbrella of unit economics and that could be a success. However, much more often marketing specialists might have withdrawn from the idea of using this method in the insurance business, being turned off by the abundance of new terminology, formulas and complicated language of speakers on the YouTube video hosting. It is quite understandable, as this method was developed for internet projects, IT startups, which is why it is marketed to internet company specialists.

Therefore, this special terminology can be disregarded for a while and we can focus on the unit economics of the insurance business or, more conventionally, management accounting per one unit.

We propose a methodology for calculating insurance products concerning accident and health insurance for athletes and home buyers using mortgages, as both cases are subject to certain cycles and the outcomes can be predicted by forecasting.

Moreover, in the described calculations, as one insurance object, we suggest designating the insurance product as the unit and further detail the costs and revenues to build demand and supply according to the laws of the market.

METHODS

The methods of financial analysis were used to structure the relationship between the main indicators of insurance operations, such as the methods of comparison, grouping, value chain specification, financial coefficients and building analytical tables for mean values.

We believe that the calculation formula per one insurance product, which we will use in our research, is meant to determine marginal profit.

In theory, the classical formula for profit can be rendered as follows:

$$\text{Profit} = \text{Revenue} - \text{Fixed costs} - \text{Variable costs} \quad (1)$$

We believe that marginal profit is the difference between the amount of revenue generated by a sale of one insurance product to one customer and marketing costs on promoting this product according to the applicable Strategy and other costs (rent payments, salaries, licencing costs, vehicle fleet maintenance costs, etc.). This model is called transaction, or product, economics (Figure 1).

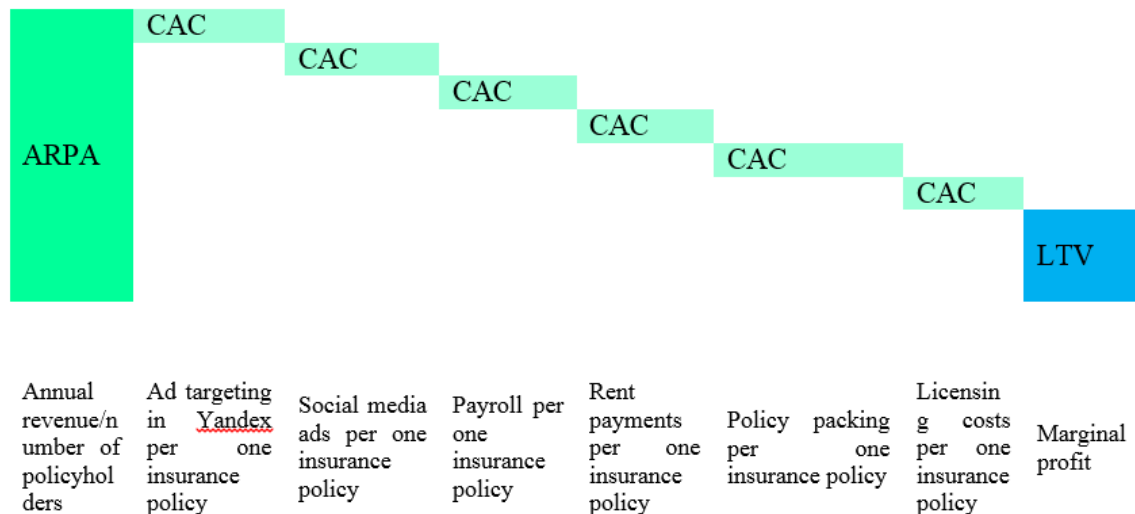


FIGURE 1
MARGINAL PROFIT GENERATION

All the above refers to the unit as the subject matter of insurance, provided that the insured object is the customer. The unit can be also tied to the insurance product, e. g., life insurance.

The focus of our research was aimed at defining a methodology for sports insurance and mortgage insurance. This is due to the fact that for these types of insurance, marketing costs are calculated for the whole complex of insurance, i. e., for all insurance types included in the complex for athletes or mortgage customers, which they are required to conclude to be allowed to trainings and competitions or, respectively, to enter into a real estate purchase deal.

RESULTS

Sports accident insurance is less than popular with insurers as an insurance product. It is only offered by major companies, as it is a high-risk insurance product. Insurers' obligations here are associated with the coverage of incidental risks. The insurance period is within one year. The calculation of risk premiums is based on the principle of equivalence in a simplified form, stipulating the equivalence of the expected values of the parties' mutual obligations. Expected levels of losses are an indication of the degree of risk. And more importantly, given these

observations above, the law of large numbers works well in this case, which means, it all largely depends on the insurer's portfolio (Tsyganov & Kirillova, 2018).

There is a problem with assigning budgets for marketing strategies for insurance products. We propose an analysis of the reasons and solutions of the budgeting problem, as well as the measures to market insurance products, which should not be ignored to avoid a loss of business.

We propose to focus on what features characterise sports accident insurance apart from the high incidence of injuries, and here is a list of such aspects: 1) unavailability of club or sports class attendance or membership without a policy; 2) cyclical, one-year coverage; 3) mass scope, as the number of customers is unlimited, or, limited by demographic numbers, i. e. approximately 100 million individuals pursuing sports in Russia.

Next, turn to the main problem, budgeting for an Insurance marketing strategy mostly calculated by professionals engaged to provide professional services of insurance marketing (i. e., marketing departments, marketing firms or freelancers). Their task is to acquire as many customers as possible and to take advantage of most marketing opportunities, which is why budgets are, as a rule, overstated. And budgets are ultimately determined by the insurance companies.

Our original research provides a successful example of applying the approaches of unit economics in financial analysis used to determine an Insurance marketing strategy to balance revenues on sales of the insurance product and costs of its marketing in the insurance market per unit.

We believe where a unit is the subject of the insurance agreement, there is higher assurance that the customer would return to the company again, as it implies a more focused influence on the customer; and again, sports insurance usually operates over one year, while in mortgage lending, the subject of the deal remains the same and the insurance objects change.

In this context, there emerges the group aspect, and it means complex insurance is accessible for forecasting and modeling, and the results can be taken into account in Insurance marketing strategies.

If the unit is a customer (the policyholder), ads should focus on the benefits for the customer differentiated from the benefits provided by competitors. Retail practice might be a useful example here, e. g., when customers are offered three items for the price of only one, this method to buy loyalty for the future involves the risk of miscalculating the costs (costs should be calculated for three products).

In this context, unit economics comes down to the relation of the total profit generated from the customer vs. acquisition costs attributed to this customer. This model applies to mortgage lending when there is a clear understanding of the period during which the policyholder would pay premiums when the total of such premiums can be calculated (revenue), and that is where LTV (lifetime value) or, interchangeably, CLV (customer lifetime value, CLV or frequently CLTV) and CAC (cost to acquire a customer) are concerned.

In terms of unit economics, the relation is as follows:

$$LTV > CAC, (2)$$

where LTV is the customer's lifetime value (Thomas, n.d.; Patel, n.d.);

CAC is the cost to acquire a customer.

This business model is called SaaS, platform as a service (Luenendonk, 2019). It operates in cycles on a subscription basis. In the insurance business, insurance is provided in one-year cycles to athletes, both professionals and active amateurs attending sports clubs and classes, both young and adults aged 3 to 79 years. Attendance is not allowed without an insurance policy. Insurance offers protection of the athletes' life and health against accidents and operates in regular periods no longer than one year. Therefore, the insurance company can analyse the cohort of insured athletes and build an Insurance marketing strategy taking into account metrics calculated by the methods of unit economics (Gorbacheva, 2020; JetStyle, 2018; Semyonov, 2020; Åman et al., 2014; Åman et al., 2016) (Figure 2).

Customer attrition coefficient shows the percentage of policyholders deciding not to extend their policies to the total number of policyholders.

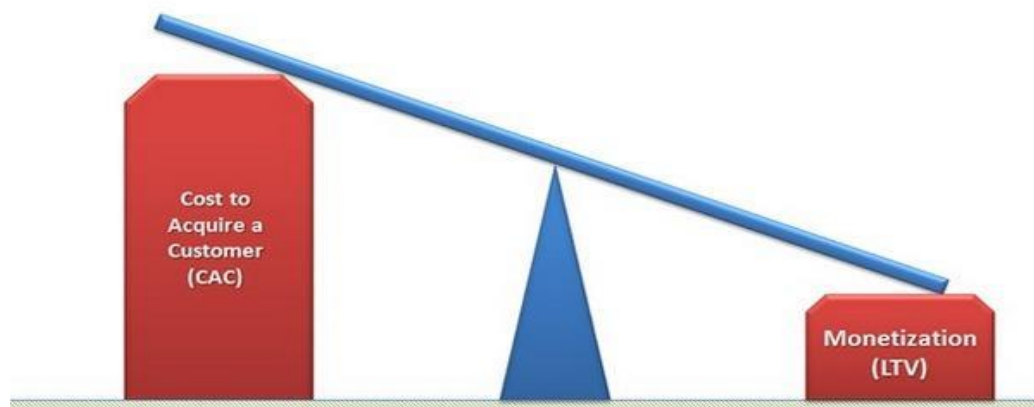
Customer lifetime duration coefficient is $1/\text{customer attrition coefficient}$.

ARPA is the level of total revenue for the given cohort (annual revenue) divided by the total number of policyholders, or average revenue per account.

$CLC \text{ or } LTV = ARPA * \text{customer lifetime duration coefficient}$.

$CAC = \text{costs}/\text{total number of policyholders}$, or costs per customer

CAC/CLV is customer lifetime value (Krasinsky, 2020)



Source: David Skok (n.d.).

FIGURE 2
AN OUT OF BUSINESS MODEL

In all these calculations, the most significant parts for the insurance business are customer lifetime value (CLC or LTV), also known as customer monetisation, or cost to acquire a customer (CAC) (Venture Accelerator, 2018). Venture capitalist David Skok (n.d.) illustrated the relation between the two metrics as a seesaw.

DISCUSSION

It is an approximation. Business models are constantly influenced by other pressures and factors, and the key is to maintain the balance.

However, as David Skok points out, this, too, is not enough. LTV (CLC) should be at least three times the level of CAC.

"Customer lifetime value should exceed the acquisition cost. It appears that LTV should be about 3 x CAC for a viable SaaS or other form of recurring revenue model" (Skok, n.d) — the approximate equation is $LTV = 3 \times CAC$.

According to David Skok, it is unacceptable for an insurance company to do without a marketing strategy and, relying on its unique positions, cut down on, or eliminate, marketing budgets for products in the hope of virality (virality is understood as viral marketing, that is, spreading ads at a near-geometrical pace. Another term for viral ads is "*word-of-mouth marketing*" relating to situations when a thrown-in ad passes on from person to person and generates a stronger level of confidence compared to other types of ads). On the other hand, when marketing costs are underestimated, it may cause a significant imbalance.

The difference between the two approaches with "*customer as a unit*" and "*insurance product as a unit*" is negligible and the outcome is the same: revenues per unit should exceed costs per unit. The difference is, in the case of "*insurance product as a unit*", the insurer calculates momentary marginal profit and compares it to marketing costs for the insurance product (Insurance marketing strategy) and administrative costs per unit. Otherwise, in case of "*customer (policyholder) as a unit*" and even if the period of insurance exceeds one year, and the premium is paid annually, we calculate LTV – revenue for the whole insurance period and compare it to CAC – all costs, specifically adjusted for inflation. An insurance marketing strategy includes marketing costs for the product for the year, which means there is no difference in terms of the amounts and timing of campaigns.

We recommend using two ad campaigns, with the first one promoting insurance products and the second one targeting customer attraction; that said, make sure to differentiate customers by the channel of reach (use a survey to identify the source of information), as it is crucial to attribute costs based on the specific ad campaign that reached the customer. It may well turn out that both ad campaigns and two units need to be maintained, then the share of costs to acquire a customer has to be calculated as per "*customer as a unit*",

$$CACc = CACc \{1 + (CACp/CACc)\}, (3)$$

where CACc is the cost to acquire a customer,

CACp is the cost to acquire a customer per product

If marginal profit exceeds customer acquisition costs, scaling decisions may be made.

We concluded that three months of work (a quarter) would be sufficient to gain an understanding in terms of the efficiency of channels and ad campaigns and thus determine the appropriate unit. But more importantly, an Insurance marketing strategy and its underlying budget should be determined, by forecasting the number of customers willing to use and monetise the company's insurance product.

As our recommendation, insurers need to gather daily figures on unit attrition to calculate an average for the reporting period (including the trial period of three months). Given the cyclicity of sports insurance (one year), the rate of attrition can be calculated according to the degree of influence of marketing efforts on sports groups (sports classes, clubs, teams, etc.), i. e., based on the influence of ad campaigns on groups of athletes. Thus, evidence can be gained over three months and attrition can be calculated for those athletes who could get a policy, under equal influences, but still turned to another insurance company. Attrition is significantly influenced by agreements with coaches or sports group leadership. Only after a year attrition

could be calculated by finding the difference between those insured and those who opted for another company.

Insurance marketing strategy development is influenced by the figures of the trial period (three months), during which conversion can be calculated as a proportion between the number of visitors at the website and those getting a policy, hot leads vs. cold leads (those who visited the website but left). Given that today ad targeting to a specific audience within a given territory is the most effective method of customer attraction, after forecasting the number of policyholders to build the financial reserve for risk events, we can multiply the average visits to the website by the conversion rate. The average visit numbers get the cost of one visit and help to calculate the budget and CAC. Ad targeting is usually available via Yandex Direct and Google AdWords.

A new service of Yandex – conversion provides a stipulated conversion and its costs calculated as the cost of cold leads which should visit the website to get to the proper number of hot leads. It builds on years of experience with numerous target audiences and marketing various products and services. It is very convenient for setting up an Insurance marketing strategy for insurance products without the need to take into account the figures of a trial period.

A key step for an insurance company is the transition toward scaling. It is when this stage is set in the Insurance marketing strategy and the marketing firm (marketing department) is assured that within an equal budget as in the previous year, it is capable of increasing the number of policies by an order compared to the previous year (Mohr, 2017).

Its assurance in the potential to multiply business as a result of efforts to build up marketing channels, reorienting budgets toward channels providing maximum results, based on a complex of metrics of one customer or one product and specifically with effective implementation of messenger marketing by integrating various messengers in social media, chatbots and CRM system (Prokhorova, 2020).

As we observed in the beginning, unit economics as a method of decision-making always targets the development of insurance marketing strategies to help the product gain leading positions in the market. It means the budget of an Insurance marketing strategy should facilitate the progress toward scaling for the insurance company (Dholakia, 2016; Siu, 2016).

CONCLUSION

The budget of an Insurance marketing strategy is calculated according to formulas of unit economics.

By applying financial analysis for two business models and calculating the target revenue and the maximum acceptable marketing costs for insurance products for one year, we can make forecasts of development and scaling as the latter helps to mitigate and offset the risks of uncertainty causing losses.

Unit economics helps the insurer to set up such an Insurance marketing strategy which, on the one hand, would be effective in terms of marketing channels and, on the other hand, adequate in terms of costs providing for at least threefold higher revenues.

Unit economics opens up the market of accident and health insurance for insurance companies, which had been traditionally considered as a loss-making business and which is expected to grow to 100 million policyholders by 2030, which means our proposals should be taken seriously.

REFERENCES

- Åman, M., Forssblad, M., & Henriksson-Larsén, K. (2014). Insurance claims data: A possible solution for a national sports injury surveillance system? An evaluation of data information against ASIDD and consensus statements on sports injury surveillance. *BMJ open*, 4(6), e005056.
- Åman, M., Forssblad, M., & Henriksson-Larsén, K. (2016). Incidence and severity of reported acute sports injuries in 35 sports using insurance registry data. *Scandinavian journal of medicine & science in sports*, 26(4), 451-462.
- Dholakia, U.M. (2016). A quick guide to value-based pricing. *Harvard Business Review*, 9.
- Filippov, S.S. (2020). *Management of physical culture and sports: textbook for universities (4th edition, revised and added)*. Moscow: Yurayt Publishing House, 234 p.
- Gorbacheva, M.A. (2020). Unit-economy. *Business Education in the Knowledge Economy*, 3(17), 41-43.
- JetStyle. (2018). *Basics of unit economics. Part 1: What is unit economics and why understanding it is important to your business?* Retrieved from <https://jet.style/blog/2018/basics-of-unit-economics-part-1-what-is-unit-economics-and-why-understanding-it-is-important-to-your-business>
- Krasinsky, I. (2020). *Unit economics: How to measure business success*. Retrieved July 15, 2020, from uplab.ru/blog/unit-economics-how-to-evaluate-the-success-of-the-business/
- Luenendonk, M. (2019). *Ultimate guide to unit economics*. Retrieved July 15, 2020, from cleverism.com/ultimate-guide-unit-economics/
- Minin, A. (2018). *Yunit ekonomika. Ch.1: istoriya poyavleniya [Unit economics. Part 1: historical evolution]*. Retrieved from <https://marketing-course.ru/unit-esonomiss/>
- Mohr, T. (2017). *Scaling the revenue engine – Chapter 12: Unit economics*. Retrieved July 15, 2020, from medium.com/ceoquest/scaling-the-revenue-engine-chapter-12-unit-economics-ce3a864438aa
- Patel, N. (n.d.). *How to calculate lifetime value – The infographic*. Retrieved July 15, 2020, from neilpatel.com/blog/how-to-calculate-lifetime-value/
- Prokhorova, O.N. (2020). Unit economics on the example of marketing solutions. *Marketing in Russia and abroad*, 5, 13-20.
- Semyonov, A. (2020). *Unit economics how to evaluate the success of the business*. Retrieved August 31, 2020, from <https://www.uplab.ru/blog/unit-economics-how-to-evaluate-the-success-of-the-business/>
- Siu, E. (2016). *8 Pricing strategies for your digital product*. Retrieved July 15, 2020, from entrepreneur.com/article/283878
- Skok, D. (n.d.). *Startup killer: The cost of customer acquisition*. Retrieved July 15, 2020, from <https://www.forentrepreneurs.com/startup-killer/>
- Steinmann, M. (n.d.) *Unit economics in practice*. Retrieved July 15, 2020, from medium.com/ongrowth/unit-economics-in-practice-ebd0a2ef345c
- Supreme Soviet of the Russian Federation. (1992). *Law of the Russian Federation of November 27, 1992 No. 4015-1 "On the Organisation of Insurance Business in the Russian Federation" as last amended on December 30, 2020*.
- Thomas, T. (n.d.). *Customer lifetime value, how to model it, how to measure it*. Retrieved July 15, 2020, from thepathforward.io/customer-lifetime-value-how-to-model-it-how-to-measure-it/
- Tsyganov, A.A., & Kirillova, N.V. (2018). Regional aspect of the Russian insurance market. *Ekonomika regiona*, (4), 1270.
- Venture Accelerator. (2018). *Unit economy and how to calculate it*. Retrieved September 01, 2020 from <https://1va.vc/webinars/yunitekonomika-i-kak-ee-poschitat.html>