

METHODOLOGY FOR A NEW GAMBLING AND LOTTERY PRODUCT / SERVICE SOCIAL IMPACT ASSESSMENT

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Abstract. The authors of the study believe that the topic of this study is very relevant in the Baltic States. Although the sector was originally set up to provide entertainment for people, there are now a large number of bargaining companies that do a great deal of damage to society as a whole and, for this reason, have a mixed view of the gambling and lotteries industry as a whole.

The aim of the study is to evaluate the methodology of the social impact of a new gaming and lottery product / service. To achieve this goal, the authors have set the following tasks:

summarize and assess the influencing risk factors;

develop a methodology for assessing the impact of new gaming and lottery products / services;

draw conclusions and suggestions;

Research methods: document analysis, qualitative data analysis. Based on the research results, new rules for the impact of gambling and lottery products / services have been proposed. This would allow the sector to be further developed while reducing the negative impact of the gambling and lotteries sector on society.

Keywords: addictions, risk factors, methodology, lotteries, gambling.

JEL code: M10

Introduction

Today, people's attitudes towards lotteries and gambling are very different. For some it seems to be the prerogative of very naive and psychologically dependent people, but for others it is a great opportunity to make big money with happiness and special skills. Some people use lotteries and gambling to get rid of everyday worries, to feel the tide of energy and enthusiasm. Excitement also plays an important role - a strong emotion that can be felt by each of us to a greater or lesser degree. The article provides information on the current situation in the AI sector, explaining the problems that should be addressed in relation to the factors contributing to addiction. The authors express an opinion on the desired changes in the gambling and lottery industry. When developing the methodology, information on addictive factors and ways to successfully reduce these addictive aspects is evaluated. Based on the developed product evaluation methodology, a solution is proposed that would allow further development of this sector, while reducing the negative impact on consumers and society as a whole. Demand for entertainment and a source of vivid emotions, this set has created a lottery and gambling business, which over time has become a separate and important industry in several countries around the world. Currently, we can see casinos or gaming halls on virtually every street. Today, the lottery and gambling business is little different from many other commercial activities. Of course, both many years ago and now, there are public disputes about the moral side of lotteries and gambling, their negative consequences. Today, addiction to lotteries and gambling is equated with drug and alcoholism (Centre for Disease Prevention and Control, 2021) is important to note that with the advent of the global network, it has become possible to play lotteries and gambling without even leaving home, which further tempts and attracts people to play their favourite games, according to the authors, mostly endangering young people and players with mental health problems (Williams, R. J., Volberg, R. A. & Stevens, R. M. G., 2012).

To reduce the risk of addiction the authors have developed a methodology for assessing the social impact of a new gambling and lottery product/service design. In order to develop the methodology as

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successfully as possible, the authors consulted and relied on the opinions of professionals during its development. In order for the authors to be able to identify the eight risk factors reflected in the article and the limits of their risks, a commission was formed, which consisted of four specialists in the field of gambling and lotteries, a professional mathematician, an addiction specialist and three authors. This type of commission was chosen to be able to assess the existing risk factors from all sides. Specialists in the gambling and lottery industry were only invited to understand the problematic situation on the part of the industry, the mathematician and the addiction specialist were able to determine the critical limits that should be observed when performing responsible activities in the field of gambling and lotteries. Thanks to the established and ultimately successful cooperation and input of the commission, in the opinion of the authors, a very valuable and important methodology for services and products was developed, which should be integrated into the gambling and lottery business in the shortest possible time.

The evaluation methodology has been developed taking into account the knowledge and experience of gambling and lottery practitioners on the desires and needs of players, the design structure of gambling and lottery products/services and customer expectations as well as global research results and information on social risks and tools to mitigate impact on vulnerable groups. This methodology sets out the principles for assessing the social impact of any new gambling and lottery product/service - risk factors, criteria rating scales, and tools for minimizing the impact of risk factors, creating an overall assessment accordingly. The methodology is applicable before the launch of a new gambling and lottery product / service. In order to reduce the pro-addictive effects, any company operating in the gambling and lotteries sector should apply this methodology to ensure that the new product does not pose a threat to the individual consumer and to society as a whole. According to the authors, a new gambling and lottery product/service is one the criteria of which are changed by more than 50 %, or a previously non-existing gambling and lottery product/service or mode of operation.

Research hypothesis: Based on the risk factors developed by the research commission and the risk assessment methodology of the new gambling and lottery products proposed as a result of the research, the industry can further develop its business while controlling and reducing the level of negative impact on the final product / service recipient.

The aim of the study is to evaluate the methodology of the social impact of a new gaming and lottery product / service. To achieve this goal, the authors have set the following tasks:

- 1) summarize and assess the possible risk factors contributing to gambling and lotteries;
- 2) develop a new methodology to evaluate new gaming and lottery products / services, and reduce addictive factors;
- 3) to develop conclusions and proposals appropriate to the gambling and lotteries industry.

Research methods: the study uses analysis and synthesis methods, deductions and induction methods as well as logical approach methods. However, appropriate quantitative methods are used to process the data obtained.

Research results and discussion

Determining the impact levels of risk factors and their reducing tools

The methodology is developed and based on eight addictive risk factors. Applying the developed addiction risk factor assessment methodology, an opportunity is created which results in the assessment of the social impact of a new gambling and lottery product / service on three levels:

- **Risk factors at the gambling and lottery product/service level.** There are six evaluation factors in this group:
 - 1) size of the prize pool;
 - 2) possible maximum winnings/savings;
 - 3) frequency of the lottery/game;
 - 4) incentive loss or the feeling that the winnings are near, "almost won" feeling;
 - 5) multiple lottery/game opportunity;
 - 6) cost per one lottery/game.
- **Risk factors at the situation level.** There is one evaluation factor in this group:
 - 7) availability, location and number of locations.
- **Risk factors at the organizational level.** There is one evaluation factor in this group:
 - 8) marketing and advertising.

Risk assessment scales

For each assessment factor, a rating scale is developed to assess the impact of a specific factor on the new gambling and lottery product/service, according to its risk level which are graded as high, medium, moderate, low risk or no risk. (Williams, R. J., Volberg, R. A. & Stevens, R. M .G., 2012). The scales for evaluating each specific factor criterion are defined below (see tables 1 to 8). From the point of view of the authors and the addiction specialist, it follows that the proportional amount of winnings influences the formation of the addiction risk. According to the developed data in Table No. 1, we see that the addiction risk factor starts to work a little from the 11 % winning fund. For the most part when a person is gambling or participating in lotteries his main goal is not to entertain after spending this time, but rather his goal is to make a profit. If a product offers frequent winnings, it makes that consumer think he is very close to winning, resulting in a strong addictive tendency to play over and over again. The recommended prize pool should not exceed 60 % as it is followed by a rapidly increasing risk.

Table 1

Size of the prize pool

Criterion No 1	Size of the prize pool				
	0 %-10 %	Up to 60.00 %	60.01 %-65.00 %	65.00 %-90.00 %	Above 90.01 %
Percent of winning pay-out					
Criterion evaluation	No risk	Low risk	Moderate risk	Average risk	High risk
Score	0	1	2	3	4

Source: developed by the authors

Changes in psychological impact occur when large savings accruals are discussed. The less significant the savings, the lower the risk factor. While it must be understood that without victory in this industry there can be no business must be able to find the golden mean so that the size of the win does not exacerbate the propensity to become addicted.

Table 2

Possible maximum winnings / saving

Criterion No 2	Possible maximum winnings / saving				
Possible maximum winnings / saving	0 € - 100 €	100.01 € - 150 000.00 €	150 000.01 € - 750 000.00 €	750 000.01 € - 10 000000.00 €	10 000000.01 € and more
Criterion evaluation	No risk	Low risk	Moderate risk	Average risk	High risk
Score	0	1	2	3	4

Source: developed by the authors

The risk of addiction is influenced by the frequency of the games or lotteries offered. When doing business in this industry, it is necessary to pay attention to the fact that when purchasing a product or service, the customer is forced to wait until receiving the final product / service. Thus, sorting the consumer in time and space from the moment of announcing the win. Considering this factor, the consumer is not "zombie" and in the event of an unfortunate win does not become addicted to make the next purchase immediately.

Table 3

Frequency of the lottery / game

Criterion No 3	Frequency of the lottery / game				
Frequency of the lottery / game	Less than once a month	From once a month to once or twice a day	From once in 10 min to once a day	From once in 6 secs to once in 9:59 min	Once in 5 sec or more often
Criterion evaluation	No risk	Low risk	Moderate risk	Average risk	High risk
Score	0	1	2	3	4

Source: developed by the authors

Unfortunately, as mentioned above, customers in the gambling and lottery industry do not gamble or participate in lotteries in order to have a good time but to get as much material benefit as possible. And if the customer has come to receive the intended win, then this criterion has a great influence. Because when you feel that you have almost won or that you are very close to winning, it creates a tendency to play again and again.

Table 4

Incentive loss or the feeling that the winnings are near, "almost won" feeling

Criterion No 4	Incentive loss or the feeling that the winnings are near, almost won feeling		
Incentive loss, or the feeling that the winnings are near, won feeling	There are no elements that give the feeling of "near winning"	One element that gives a person a "near winning" feeling	There are elements that give the feeling of "near winning"
Criterion evaluation	No risk	Low risk	High risk
Score	0	1	4

Source: developed by the authors

Each additional opportunity that increases the probability of winning increases the risk factor. Although the biggest risk is with the system game according to industry experts if the system game is played by several people as people in financially rich countries do then the system game is not exposed to a high degree of risk.

Table 5

Multiple lottery / game opportunity

Criterion No 5	Multiple lottery / game opportunity			
Multiple lottery / game opportunity	No such opportunity	No more than 1 additional game per draw/game	More games and additional games within one draw/game	Additional chances (with extra winnings plus to the winning fund)
Criterion evaluation	No risk	Low risk	Moderate risk	Average risk
Score	0	1	2	3

Source: developed by the authors

The following table shows the effect of price on the formation of dependence. The higher the price of a product / service, the lower the risk factor. Among financially different customers, these impact indicators may vary, but most observations show that if the purchase value of a product / service exceeds one hundred euros per variant, then this is not considered to be a factor contributing to the risk of dependence.

Table 6

Cost Per Lottery / Game

Criterion No 6	Cost per lottery / game				
Cost per one lottery / game	100 € and more	1.50 € - 99.99 €	0.75 € - 1.49 €	0.50 € - 0.74 €	0.02 € - 0.49 €
Criterion evaluation	No risk	Low risk	Moderate risk	Average risk	High risk
Score	0	1	2	3	4

Source: developed by the authors

In the current context of the world, due to the severe travel restrictions created by the COVID-19 advantage, many people are forced to do many everyday things, such as sending food home, working from home offices or workplaces. Performing a lot of functions without leaving home and doing the necessary things on the Internet increases and increases the likelihood of encountering the gambling and lottery industry on the Internet, thus providing access to this industry's product / service without leaving home. As shown in the table with the number of points indicated between points of sale and the Internet, there are very sharp increase in risk factors.

Table 7

Availability, Location and Number of Locations

Criterion No 7	Availability, location and number of locations	
Availability, location and number of locations	On spot	On Internet
Criterion evaluation	Low risk	High risk
Score	1	4

Source: developed by the authors

The goal of any advertisement promoting your product / service in this case is the gambling and lottery industry is to reach the widest possible audience for self-designed advertising that works as a marketing ploy to increase the company's profitability. Thus promoting your business. The gambling and lotteries industry is no exception, so in order to reduce the risk factors that affect marketing and advertising, it is advisable for the industry not to advertise. (Gambling and lottery advertising restrictions and their impact on the player/client., 2019)

Table 8

Marketing and Advertising

Criterion No 8	Marketing and advertising		
Marketing and advertising	No gambling and lottery product/service ads	Gambling and lottery product/service ad plan respects code of ethics	Gambling and lottery product/service ad plan does not respect code of ethics
Criterion evaluation	No risk	Low risk	High risk
Score	0	1	4

Source: developed by the authors

During the development of the evaluation factors, several consultations were performed with specialists in the field and based on the previous experience of the authors in developing and publishing articles and research related to this field such as gambling and lottery advertising restrictions and their impact on the player/client.

Assessment scale of instruments to minimize risk factor impact

For each existing tool, a specific rating scale has been developed to mitigate the impact of the considered and assessed addictive risk factor. These developed tools assess aspects to reduce the impact of each new or improved existing gambling and lottery product / service addiction risk on the customer / player as low, moderate, medium and high. The following table shows a developed scale that can be used to assess each addiction risk factor / criterion to achieve the addiction risk reduction potential. The impact of the instrument on the addiction risk factor is assessed separately for each identified addiction risk factor according to the type of gambling and lottery products / services.

Table 9

Evaluation of the Instruments for Eliminating the Impact of Risk Factors

No.	Evaluation of the instruments for eliminating the impact of risk factors			
	Low impact	Moderate impact	Average impact	Strong impact
1.	Leaflets about responsible gaming (RG), section of responsible gaming in home page with info that there is no way to influence luck. Informing sales person about responsible gaming.	Available on TV and on home page (RG info on every page) RG – self-test of playing habits and info for help.	For interactive draws and gambling: requirement to set max limit for one stake or total sum of stakes for next 24 hrs.	For Internet games: possibility to block one's account temporarily or completely. For interactive games: prohibition to play games installed by submitting official application that can be recalled no sooner than in 12 months.
2.	For draws – in brochures for customers and sales person and on the website on each page a sign that LL does not recommend to buy/sell lotteries to people under 18. On the Internet only people over 18 can register after the identity check.		Possibility to decrease the limits set at any time, but there is a waiting time for decreasing limits or for stake limits – 7 days after the request for increasing.	Limiting additional games
3.	For draws: availability of info about % of pay-outs and probability on TV and website. (Does not refer to interactive gaming).		Remote sales channels can constantly display the balance of the player's account, timing of the session, possibility to set losing limits within time (in case those are not set by a player, daily losing limit is set automatically) For interactive draws and gambling: requirement to set a stake limit or their total limit for the next 24 hrs.	
4.	For Internet games - on the website there are RG video/campaigns.			

Source: developed by the authors

Modifying assessment results according to their social impact

The authors, with the help of a professional mathematician and based on his knowledge, performed calculations and their analysis. Based on these results, the following two tables show the recommended criteria on which to base your future actions when introducing new or revising and improving existing products / services in the gambling and lotteries sector. After assessing all addictive risk factors and assessing the social impact on each gambling and lottery product / service according to each risk factor and the applicable risk mitigation tool, each result is changed by applying the appropriate scale or weight of each risk factor and the applicable social mitigation tool. Initially, it is necessary to take steps to determine the distribution of critical points by position. The first step to be taken is to work on the distribution of critical points by position. Once this has been identified and done, calculations and a correct division into addiction risk categories are needed. The social impact assessment methodology assumes that the desired impact of a gambling and lottery product / service should be at least 180 points and should not exceed 300 points.

Table 10

Distribution of critical points

Criterion No.	Name of criterion	Weight of risk factor in %	Risk decreasing instr. Weight in %	Evaluation of game					
				New game					
				On the ground			On the Internet		
				Assessment	Assessment of risk of decreasing instruments	Weighed assessment	Assessment	Assessment of risk of decreasing instruments	Weighed assessment
No.1	Winning fund/ amount of theoretical winning	25%	-2%	2	3	25	4	1	98
No.2	Jackpot/ the biggest possible winning	20%	-3%	2	3	80	2	4	28
No.3	Frequency of draw/game	15%	-4%	2	3	15	4	10	20
No.4	A stimulating loss, feeling of almost winning	10%	-2%	2	3	10	4	6	28
No.5	Possibility of more draws, games	5%	-2%	2	1	20	3	0	15
No.6	Price of draw/game/service	10%	-3%	2	1	10	4	1	37
No.7	Availability, location of playing sites and their number	5%	-1%	2	3	5	4	10	10
No.8	Marketing and advertisement	10%	-3%	1	3	10	0	0	0
Total		100 %	-20	100%		140			236

Source: developed by the authors

Table 11

Breakdown of risk categories

Less than 180	100 - 126	Lowest margin in a low risk category	Low risk for vulnerable players
	127 - 152	Moderate margin in a low risk category	
	153 - 179	Highest margin in a low risk category	
180-300	180 - 219	Lowest margin in a moderate risk category	Moderate risk for vulnerable players
	220 - 259	Moderate margin in a moderate risk category	
	260 - 300	Highest margin in a moderate risk category	
More than 300	301 - 333	Lowest margin in a high risk category	High risk for vulnerable players
	334 - 366	Moderate margin in a high risk category	
	367 - 400	Highest margin in a high risk category	

Source: developed by the authors

In case the new product falls within margins of 180 – 300 points, the design elements of the new product should be reconsidered or – the risk decreasing instruments should be reconsidered so that the negative social impact on vulnerable groups is minimized and the assessment of the new product would approach "green category" of 179 points or below. The assessment of addiction risk factors can be divided according to the traffic light principle. If the total number of points does not exceed 180, then we have to mark this

indicator in green and it symbolizes that the risk factor for addiction is low and we can move forward. From 180 to 300 points in our traffic light should be a yellow light which means we are careful there is a need for adjustments. If our calculations show that the total number of evaluation points exceeds 300 points, the industry must take immediate action to stop traffic in the process of developing a new or existing product. Just like people stop at a red light on a traffic light.

Introducing a gambling and lottery product/service, its evaluation and conduct after it has been initially assessed

- 1) Assessment should be performed in the following way:
 - after taking a decision to launch a new gambling and lottery product/service the involved parties develop a gambling and lottery product/service concept;
 - as soon as it is in place, assessment of gambling and lottery product/service social impact is performed according to the criteria and risk decreasing instruments of this methodology;
 - the new gambling and lottery product/service assessment is performed by a commission of at least three members;
 - the commission:
 - assigns points to the new gambling and lottery product/service according to the scale in two categories – for products on the Internet and on the ground;
 - minuses points to the gambling and lottery product according to the risk decreasing instruments.
- 2) The points are either added or subtracted using relevant scales.
- 3) After every new assessment of gambling and lottery product/service assigning points to it, the commission takes a decision about further development of the product depending on the score of the product has received. The decision of the commission should be properly documented.
 - In case gambling and lottery product/service is in the red category, there are actions suggested to modify the design and principle of the new product and to apply risk decreasing instruments to minimize the possible negative social impact on vulnerable groups. After modifications have been performed, the responsible specialists submit the product for a new assessment by the commission.
 - In case gambling and lottery product/service is in the yellow category, the commission suggests how to minimize the possible negative social impact on vulnerable groups but this assessment gives permission to further the development of the product without modifying the principle of the product and without applying additional risk factor decreasing instruments;
 - In case gambling and lottery product is in the green category, the commission approves the product.

Conclusion

- 1) The current global situation of COVID-19 restrictions on the movement of people, giving people more time to spend on computers and online gambling and lotteries, and high activity on the part of the industry's business, increases the causes of addiction risks by at least four times;
- 2) According to gambling and lottery experts, immediate availability and quick information about winnings, is the main risk factor, resulting in a sharp increase in the effects of addiction;
- 3) In a situation where it is ensured that the customer is separated in time and space from the receipt of the final product, then this customer is at least slightly protected from the increased impact and formation of the risk of addiction;

- 4) When creating advertising content, players in the gambling and lotteries industry try to follow the general advertising regulation, although this advertising industry is monitored, in the opinion of the commission members, it is not done at the appropriate level;
- 5) Despite the fact that lotteries and lotteries have a lower risk of wagering than those that arose from gambling, there is still such a risk when participating in lotteries and lotteries.

Proposals, recommendations

- 1) It is recommended to develop a new, additional methodology for reporting and monitoring available information on winnings and how often these announcements are published;
- 2) Recommendation and request all companies operating in the gambling and lotteries sector to take into account and adhere to the principles of this developed valuation methodology when developing new or improving existing products and launching them;
- 3) Gambling and lottery supervisors need to develop new legislation requiring information so that supervisors can qualitatively ensure control and supervision of the necessary period between the purchase of a product / service and the announcement of the results;
- 4) It is necessary to develop and harmonize amendments to the regulatory enactments, which determine the principles of responsible advertising and with the help of which it will be possible to more effectively monitor and control the availability of gambling and lottery advertisements and the presence of advertising risk factors;
- 5) Stronger involvement of each country, individually and in cooperation with the European Lotteries Association, is needed to combat illegal online gambling and lotteries and to develop concrete steps to combat this illegal activity as effectively as possible and in the shortest possible time. available networks;
- 6) After consulting the members of the established commission, it is concluded that by changing the conditions of the criteria, it is possible to apply the established methodology in other sectors as well.

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