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### INBOUND MARKETING: PRACTICAL ASPECTS OF PROMOTING GOODS AND SERVICES IN E-COMMERCE

**Abstract.** *This paper summarizes the features of the functioning of e-commerce in Ukraine. It has been proven that the activity of e-shops as important subjects of the e-commerce market is under-regulated. This leads to consumer dissatisfaction with service quality in the online environment. The necessity of criteria creation was shown, which give them opportunities to e-shops management improve their service and enhance the level of satisfaction of target consumers, primarily based on the effective use of the newest method of promoting goods and services in e-commerce - inbound marketing on the example of infant nutrition. Rating evaluation of functional characteristics of infant nutrition e-shops was done using methods of multicriteria analysis, namely the COPRAS method. It is determined that the functionality and convenience of the e-shop are the main criteria that shape their competitive advantage. The focus of the paper is concentrated on the building rationale for promotion e-shops with the latest inbound marketing techniques. Peculiarities of using different inbound marketing tools on each stage were defined, which implicate a change of Internet-user status from visitor to promoter. An example of evaluating existing alternatives for promoting e-shop (inbound marketing, outbound marketing, or no promotion, in general, was provided). In particular, the decision-making process for choosing promotional tools for infant nutrition e-shop was schematized with the basis of alternatives evaluation by using one of the most common decision-making tools – decision tree. The economic effectiveness of using inbound marketing tools in comparison with outbound marketing tools was proven. The proposed methodological approach can be used by e-shop management for substantiation of management decisions on optimization of goods and services promotion and will increase the loyalty of target audience and popularize brands in e-commerce.*

**Keywords:** *COPRAS method, decision-tree, e-commerce, e-shop, inbound marketing, infant nutrition, lead, outbound marketing, promotion.*

**Introduction.** Due to the fast development of Internet technologies, there are radical changes in the purchasing behaviour of Ukrainian consumers, increasing the role of the digital channel (e-commerce) among shopping channels. The volume of the e-commerce market reached 5.65 billion dollars in 2016, which was 4.5% of total turnover (Yurchak, 2013). The national segment of e-commerce is growing rapidly - Ukraine entered the top-10 countries ranking as the country where the share of online buyers was significantly higher than anticipated (44% compared to 24.9% in the forecast). In 2016, Ukraine ranked 54th among 137 countries according to the UNCTAD B2C E-commerce Index, which indicates the prospects for the e-commerce channel development in the country. Despite the growing demand for online

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purchases business often finds itself unready to meet the high expectations of consumers, while competing not only with domestic e-shops but also with international ones (AliExpress, eBay, Amazon). According to Ukrainian retail association, one-third of all Ukrainian purchases were made in foreign e-shops. The Ukrainian segment of e-shops is characterized by a limited range of products, inconvenient functionality, problems with payment and goods delivery, limited use of effective promotional tools. Solving these issues is a key task for domestic players in e-commerce. Ukrainian consumers show a higher level of trust to foreign e-shops mainly because the effectiveness of e-commerce players is compliant with regulated norms and rules in the developed countries. One of the main documents in this area is the FEDMA E-Commerce Code, which is designed to protect consumer interests, primarily related to confidentiality and creating an atmosphere of trust for e-commerce players. This Code is the ethical standard for conducting Internet business it concerns the activities of e-shops, so Ukrainian players should use its main principles in its everyday operations.

**Literature Review.** The peculiarities of the e-commerce development in Ukraine are highlighted in the works of Ukrainian researchers (Kopytko, 2006; Makarova, 2002; Oklander M. and Oklander T., 2017; Pleskach and Zatonatska, 2007; Yarova, 2010) and other. The researchers analyzed the current state of electronic commerce in Ukraine, defined the prospects for its development and outlined the range of problems, which prevent the active development of this type of economic activity. M. A. and T. O. Oklander showed the specifics of advanced digital marketing communications tools, their capabilities and benefits; systematized the goals of marketing activities on the Internet. Based on this, they proposed a model of the latest marketing communications and noted that considering the benefits of cutting-edge technologies, an effective communication campaign should integrate both digital and traditional tools (Oklander M. and Oklander T., 2017). Brian Haligan and Dharmesh Shah firstly defined the concept of inbound marketing as advertising through blogs, podcasts, videos, e-books, social networks, SEO and other forms of content marketing. They noted that the best marketing technique is to create powerful and attractive content, which in the literal sense of the word "catch". Content should be posted in blogs and social media, which should pop-up on the search results pages in search engines (Haligan, B., 2009). Various aspects of using the inbound marketing tools as the main toolkit for promoting in digital are considered in the works of Ukrainian and foreign researchers (Glinenko and Daynovsky, 2014; Ilyashenko and Ivanova, 2015; Rancati et al., 2015; Yurchak, 2013; Yazvinska and Yelisova, 2014) and other. There is a fully reasonable proposal of Ilyashenko S. M. and Ivanova T. E. about the functional approach of systematizing digital marketing tools. The authors disclosed the essence of each of the eight categories of digital marketing tools and gave recommendations on the usage of tools by companies of different sizes. The essence of inbound marketing and its general tools, the preconditions of its occurrence, the procedure of lead generation and their transformation into loyal consumers was revealed in the work of N. Yavinska and I. Yelisova.

Despite thorough research of e-commerce development issues in Ukraine by Ukrainian researches, the issue of practical tools development is being actualized based on scientific research, which would be an important platform for improving the quality of service provided by e-commerce players. Currently, activities of e-shops as important e-commerce players are not enough regulated, which leads to consumer dissatisfaction with the quality of service. Therefore, the necessity of criteria development is actualized, which will allow the managers of e-shops to improve the services and increase the level of satisfaction of target consumers. First of all, this is based on the effective use of the latest method of promotion of goods and services in e-commerce – inbound marketing. This article aims to develop practical aspects of infant nutrition e-shops promotion with the use of inbound marketing tools as an integrated approach to the promotion of goods and services in e-commerce and to evaluate the functionality of e-shops based on the criteria that determine their competitive advantage.

**Methodology and research methods.** Peculiarities of e-commerce development in Ukraine were considered based on the content analysis within the empirical part of the study; the service quality of

Ukrainian e-shops was assessed on the example of the infant nutrition category. The following methods were used during the empirical studies: defining criteria for choosing strategic vectors for e-shops functionality development was based on the observation and generalization by using the results of online survey; rating of alternative strategic vectors according to predefined criteria was made using analytical method; systematization of the study results was made with the use of dynamic approach; the method of expert assessments and interviews was used for importance determination of pre-selected criteria.

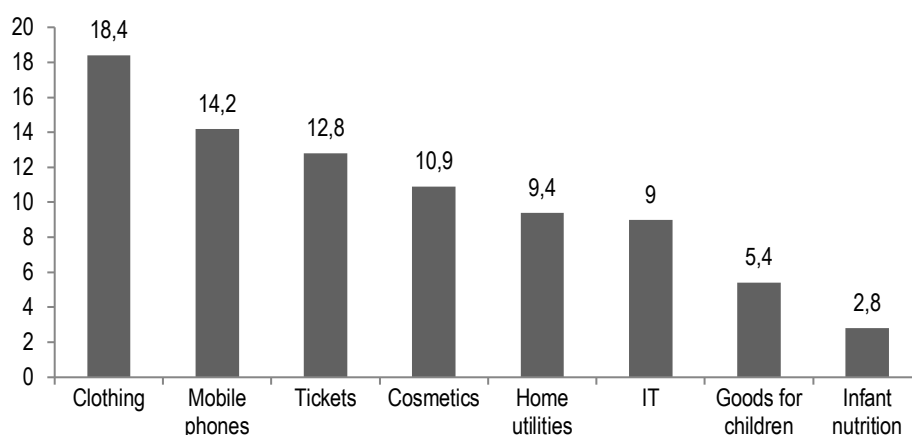
The decision of choosing strategic alternatives in practice can be simplified to their ranking using multicriteria analysis, which is widely presented in the management theory and practice. Multicriteria analysis is an approach of alternatives evaluation based on the several criteria, where the criteria are quantitative and/or qualitative indicators used to compare alternatives from the position of their approximation to the goal. One of the multicriteria methods is COPRAS method (COMplex PROportional ASsessment), which is used for determining the priority and the utility degree of alternatives (Balan, 2008). This method is widely used by its authors, their students and experts involved in the evaluation of complex processes using multicriteria methods of analysis (Podvezko, 2011). To build a well-argued ranking among the most popular Ukrainian specialized e-shops, the authors have applied one of the methods of multicriteria analysis, namely the COPRAS method. The main concept of the COPRAS method: the evaluation of  $i$ -th alternative has directly proportional effect from maximizing criteria with monotonically increasing target function and is inversely proportional to the sum of the weighted normalized values of criteria, which have steadily decreasing target function (Balan, 2008).

The negative aspect of the scientific and methodological experience was found in the difficulty of finding qualified experts and subjectivity of their opinions. Solving the issue of selection and evaluation of criteria constraints for the choice of the strategic alternatives was based on the generalized results of an expert survey in the chosen field of research (20 managers of e-shops). To assess e-shops, which sell baby goods in general and infant nutrition in particular, an online survey was conducted according to selected criteria for the target audience - parents of children between 0 and 3 years, who purchase infant nutrition in e-shops at least once a month. Study design presupposed the usage of Lickert scale (a psychometric scale that allows expressing the degree of agreement or disagreement with the statement; the scale is ranked from 1 to 5, where 1 completely disagrees and 5 is fully agree) and the semantic differential (the discrete scale, where the respondent can evaluate its attitude to the studied object using the scale with 7 spaces between two polar adjectives along each dimension, where 1 is the worst score and 7 is the best score) to get parents' answers about infant nutrition e-shops evaluation regarding the service quality on the selected criteria. We received 83 filled online questionnaires from 120, which is 69.17% and is quite legitimate. For further research, 50 questionnaires were selected due to full consumer's answers on all questions, which made the study target audience. Few alternatives have been identified to justify the tools for e-shop promotion - inbound marketing technique, outbound marketing technique or no promotion at all. To assess these alternatives of e-shop promotion one of the most widely used decision-making tools was selected, namely the decision tree, which allows schematically present the decision-making process of appropriate technique selection (Brijain et al., 2014).

**Results.** Despite the economic crisis the infant nutrition market in Ukraine was less affected by changes in the economic conditions compared to other FMCG segments. Particularly, this can be related to the mentality of Ukrainians, who will reduce the expenditures on baby food in the last turn to provide the child with the best nutrition. At the same time, from the ease of doing business, the infant nutrition market has many limitations, because the quality and safety of infant nutrition products are monitored much more seriously, started from local governments to international institutions. They control infant nutrition manufacturers to force them to comply with all the rules in accordance with the International Code of Marketing of Breast-milk Substitutes adopted by the World Health Organization in 1981. This document regulates the marketing of infant formula and prohibits the advertising of breast-milk substitutes, auxiliary

devices (feeding bottles, etc.) and any activities, which encourage the transfer of children from breastfeeding to infant formula usage, e.g. free samples, promotion among medical staff, medical staff gifts, etc. Such restrictions are aimed at supporting breastfeeding and stimulating socially responsible behaviour by infant nutrition producers.

In general, the infant nutrition market can be divided into two main segments – infant formula and baby food. Infant formula occupies about 40% of the market in value, which is a relatively stable segment (Nielsen data). The baby food segment is 60% of the market, which includes the following sub-segments: infant cereals, meals and drinks, sour milk products for children (kefir, cottage, yoghurt). The baby food segment is growing, indicating a way out of the crisis and a rebound in the home-mode trend, which has emerged in recent years. The target audience in infant nutrition category is women aged 20 to 35 with children under three years of age. This is one of the biggest categories of consumers in digital, because every five of six mothers use the Internet (84%), making online purchases 1.5 times more often than the Ukrainian population (TNS MMI Ukraine, 2016). However, according to the activity of market behaviour in different categories of purchases (Fig. 1), the purchase of infant nutrition online has the potential of developing this channel.

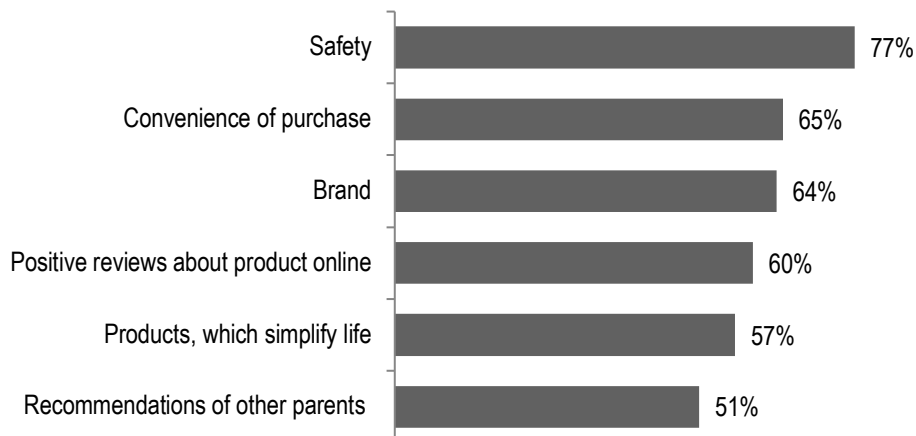


**Figure 1. Categories, where mothers make online purchases in Ukraine**

Source: adapted by the authors based on (TNS MMI Ukraine, 2016).

The infant nutrition market has specifics in consumer decision-making because safety is one of the key criteria of purchasing. Also, the opinion of other people is important in this category – online reviews or friends' recommendations (Fig. 2).

Purchasing of infant nutrition online doesn't grow as fast as other online shopping categories. On the one hand, the mother may have some doubts about product quality, proper storage conditions, etc. On the other hand, the e-commerce channel in infant nutrition category is less developed in comparison with the e-commerce channel in IT or mobile phones categories, which is developing for a longer period. It is important to analyse the activities of the main infant nutrition e-shops to determine their functionality. Among others, there were selected specialized e-shops: Antoshka.ua, Pampik.com, Yourhappy.com.ua, Agusik.com.ua, Papi.com.ua and Vdn.org.ua. According to the annual visits' statistics, these are the most popular Ukrainian specialized e-shops, which are selling goods for children in general and infant nutrition in particular.



**Figure 2. Criteria for choosing infant nutrition products**

Source: adapted by the authors based on (BabyCenter 21st Century Mom® Insight Series, 2015).

The analyse of these sites from the consumer point of quality of service was done by the criteria:

1. Search functionality to find quickly the appropriate product (P).
2. Sorting of goods by price, popularity, sale & promotions, etc. (S).
3. Categorization and searchability within the category (C).
4. Ratings and product reviews from other consumers (R).
5. Assortment (A).
6. Detailed information about the goods: images, information about the composition of the product, etc. (DI).
7. Articles, reviews, consultations, advice from experts about the choice of products - relevant content (RC).
8. Terms of delivery and payment (DP).
9. Contacts (C).
10. Adapted for the mobile version of the site (M).

Based on the responses of 50 people representing the target audience of the research a summary table of results was generated using the COPRAS method (Table 1). The experts determined the weight of each criterion.

**Table 1. Initial data for multicriteria analysis: evaluation of the functionality of e-shops based on a 10-point scale**

	P	S	C	R	A	DI	RC	DP	C	M
Function	max	max	min	max	max	max	max	min	min	max
Weight of criterion	0,05	0,05	0,15	0,1	0,15	0,2	0,1	0,1	0,05	0,05
Antoshka.ua	8	9	2	8	9	8	1	3	3	8
Pampik.com	6	9	1	7	9	9	8	2	2	0
Yourhappy.com.ua	7	0	6	8	8	8	7	4	3	0
Agusik.com.ua	8	5	5	0	7	6	0	5	3	8
Pipi.com.ua	6	8	3	7	8	8	0	3	3	0
Vdn.org.ua	6	7	5	2	5	4	1	5	3	7

Source: developed by the authors.

According to COPRAS method, it is necessary to normalize the decision matrix using the formula (Balan, 2008), where  $x_{ij}$  – evaluation  $i$ -th alternative according to  $j$ -th criterion, and  $n$  is the number of alternatives:

$$r_{ij} = \frac{x_{ij}}{\sum_{k=1}^n x_{kj}}, \quad (1)$$

**Table 2. Normalized decision matrix according to the COPRAS method**

	P*	S*	C*	R*	A*	DI*	RC*	DP*	C*	M*
Function	max	max	min	max	max	max	max	min	min	max
Weight of criterion	0,05	0,05	0,15	0,1	0,15	0,2	0,1	0,1	0,05	0,05
Antoshka.ua	0,1951	0,2368	0,2105	0,2500	0,1957	0,1860	0,0588	0,1842	0,1628	0,3478
Pampik.com	0,1463	0,2368	0,2368	0,2188	0,1957	0,2093	0,4706	0,2105	0,1860	0,0000
Yourhappy.com.ua	0,1707	0,0000	0,1053	0,2500	0,1739	0,1860	0,4118	0,1579	0,1628	0,0000
Agusik.com.ua	0,1951	0,1316	0,1316	0,0000	0,1522	0,1395	0,0000	0,1316	0,1628	0,3478
Pipi.com.ua	0,1463	0,2105	0,1842	0,2188	0,1739	0,1860	0,0000	0,1842	0,1628	0,0000
Vdn.org.ua	0,1463	0,1842	0,1316	0,0625	0,1087	0,0930	0,0588	0,1316	0,1628	0,3043

Source: developed by the authors.

Based on the normalized decision matrix, a calculation was made for  $S_{+i}$  – weighted sum of estimates according to criteria, which have a monotonous increasing target function and for  $S_{-i}$  – the weighted sum of estimates according to criteria, which have a monotonous decreasing target function for each  $i$ -th alternative (Balan, 2008). Based on this there were made calculations for the resulting indicator  $Z$ , which allows forming the rating of alternatives.  $Z$ -indicator was calculated using the formula:

$$Z_i = Z_{+i} + Z_{-i} = S_{+i} + \frac{\sum_{k=1}^n S_{-k}}{S_{-i} * \sum_{k=1}^n \frac{1}{S_{-k}}}, \quad (2)$$

**Table 3. Final evaluation of the functionality of e-shops and their rating based on the convenience for the consumer**

	Z <sub>+</sub>	Z <sub>-</sub>	Z	Rating
Antoshka.ua	0,1364	0,0585	0,1949	2
Pampik.com	0,1593	0,0969	0,2562	1
Yourhappy.com.ua	0,1380	0,0311	0,1691	3
Agusik.com.ua	0,0845	0,0322	0,1166	5
Pipi.com.ua	0,1030	0,0492	0,1522	4
Vdn.org.ua	0,0788	0,0322	0,1110	6

Source: developed by the authors.

Thus, the rating of e-shops functionality according to the COPRAS method is as follows: Pampik.com, Antoshka.ua, Yourhappy.com.ua, Pipi.com.ua, Agusik.com.ua, Vdn.org.ua. At the same time, none e-shop has received the maximum ratings according to the selected criteria. This is due to the fact that most of them are not so convenient for making a purchase. While accessing the site for the first time it is difficult to navigate, the main page is overloaded by announcements, promotional banners, news, lists of top products, etc. Therefore, we will analyse the main disadvantages according to each criterion. The search functionality is a must-have for any infant nutrition e-shop.

Most moms come shopping online because of the lack of time for shopping in ordinary stores.

Therefore, the convenience of finding a product in the e-shop is mandatory. For example, infant formula consumers rarely switch their brand, that's why they are looking for a specific product of a brand that they are accustomed to using. In some e-shops, the brand search could be done both in Cyrillic and in Latin, which was their competitive advantage, as only some of the consumers are accustomed to introducing the brand name in the original English. The function of product sorting is relevant for many consumers precisely in terms of price and promotional offers. Baby food products are characterized by switching between brands and flavours, therefore sorting function helps consumers to find promotional offers quickly and make purchases.

Categorization determines how convenient the site is for use. Categorization in each e-shop differed, although the category of infant nutrition is the same. Let's analyse categorization using the example of sub-segment infant cereals. In some e-shops, the only category of infant cereals exists, where you can sort by brand. Some e-shops have created two categories – standard infant cereals and complete infant cereals with further sorting by brands. None of the proposed infant cereal categorizations does reflect the real needs of moms for making a purchase decision online. When categorizing infant cereals it's necessary to take into account the following criteria: milk base (complete/standard), cereal base (rice/corn/buckwheat/oat / multi cereal), recommended age (first feeding / from 6 months / from 8 months / 12 months), addition of fruits, gluten or gluten-free, organic or not, as well as the brand. The presence of such filters in the category of infant cereal will help mother quickly pick up the necessary product, which reflects her need for a limited time to make a purchase decision.

Ratings and reviews on the site are very important for the decision-making process because the consumer wants to know the opinions of other consumers who have already purchased or used the product. There is a correlation between positive online ratings and product quality from the potential consumer (Gao et al., 2015), which is very important especially for infant nutrition products. Currently, this functionality is used by some e-shops only partially, somewhere you can leave a review, but such activity is not stimulated in any way. So, while searching any reviews about the product consumer can leave the e-shop and go to the sites with popular reviews (irecommend.ru, otzovik.com, otzyvua.net, etc.), which negatively affects the conversion and sales figures in the end.

The assortment is a criterion that needs no explanation: the wider assortment, the greater likelihood that the consumer will find the exact product, which fully satisfies its needs. This is especially true for highly specialized goods that are difficult to find at retail outlets - for example, the formula for premature babies.

Detailed product information is an obvious criterion, which is often neglected by Ukrainian e-shops. While shopping in the ordinary store, the consumer could view the product and read the information on the label, but digital often left consumer without such a possibility. It's obvious that without relevant information about the product consumer is less intended to buy it.

The product page must have at least information about the composition of the product, preparation guide, i.e. information from the label. Having a product image is also important because consumer can compare this image with a product that he already uses and order a similar one. It should be noted that the product information and image should be always updated because manufacturers often change the label or formula. There is can be situations when e-shop provides the out-of-date information about the product and consumer receives the ordered product with another label, which leads to a lot of questions and complaints, including forgery, which adversely affects the e-shop image. Relevant content – Ukrainian e-shops do not use the possibility to turn from "online shelf" to "expert in product selection". For example, there are consultants in baby stores who help the consumer to choose the right product. The e-shop can offer an article or product review of different brands to make it easier for mom to choose and ultimately encourage her to buy. Creating online consultants or chatbots is also one of the options for helping mom with decision-making. Terms of delivery and payment – this is the basic criterion for choosing the e-shop. Nowadays consumer wants to order and get the goods immediately and not in a few days. A pleasant



bonus will be a free delivery, which is offered extremely rarely and only from a certain amount of purchase in our realities. Payment conditions should also include different payment methods for the convenience of the consumer. It should be noted that in many e-shops the page "payment and delivery" contained a huge amount of information, restrictions and exceptions, which causes the intention of the consumer to leave this e-shop and not to work out nuances.

Contact form as the ability to call and clarify details about the product, its shelf life, delivery terms and payment is mandatory for all e-shops. The presence of a mobile version of the site is a significant advantage since many consumers make orders, not from a computer or a laptop, but a mobile phone. This is especially true for infant nutrition target audience because mothers often make orders during a walk with a baby or even at home from a mobile phone due to lack of time. This advantage has been taken only by some of the listed e-shops. Consequently, the functionality and convenience of working with e-shop form the basis for providing qualitative service and is a prerequisite for e-shop success, while promotion helps to continuously develop e-shop.

Along with traditional promotional methods, inbound marketing technology is becoming more and more popular. Inbound marketing is a relatively more complex approach that includes the simultaneous use of all digital channels, the continuous improvement of the website, the development of relevant content and the implementation of measurement tools and their combination for achieving high results (Rancati et al., 2015). Inbound marketing is especially important for e-shops since the fastest transformation of the internet user into a promoter will contribute to achieving the financial goals of the company. The difference in inbound marketing techniques is their active usage after the Internet user has an interest/need for a product. Thus, there is no blind imposing of goods to users, which greatly reduces the irritation from direct advertising aimed at a wide audience.

The use of inbound marketing techniques takes place in several stages, which changes the consumer status from the Internet user to the promoter (Fig. 3) and require the use of different tools.

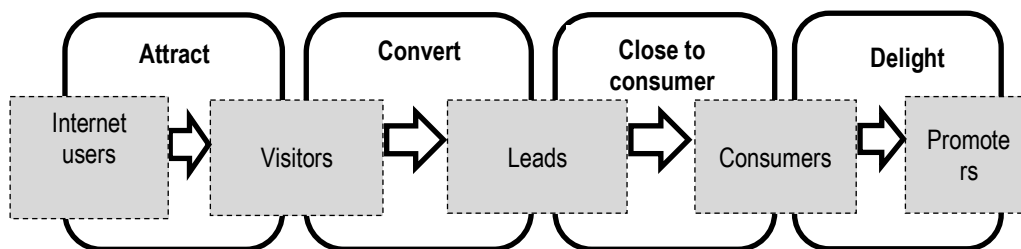


Figure 3. Inbound marketing stages

Source: adapted by the authors based on (Yarova, 2010).

Practical use of inbound marketing techniques begins with the attraction of Internet users to the website or e-shop site, but not with the traditional tools (banners or video advertising, which are distracting to the consumer). Inbound marketing techniques include SEO-optimization, advertising through search keywords, advertising on social networks, etc. For example, when typing the phrase "buy infant formula" in Google search, there will be e-shops marked by "advertising" tick at the beginning and the end of the results page, which are promoted by inbound marketing methods for attracting Internet users. Another example is the own page of e-shop in social networks, which allows attracting users through a promotional post with sale information or price reductions.

If the Internet user goes to the e-shop site, he becomes a visitor. At this stage, the functionality of the site and its components, which were described earlier, becomes very important. Besides, the "call-to-action" elements are required. These are short messages intended to force the user to switch to another

page. This is information about promotions, discounts, sale, and contests on the main page of the e-shop site, which is used to create interest of the visitor, who gets to the main page of the site for the first time. Thus, it is worth referring to relevant content on the site and "call-to-action" elements among the inbound marketing techniques that can be used by e-shops at this stage.

From attracting the user to the e-shop, the status of "visitor" is inadequate, since it is difficult and cost-inefficient to catch up him with the remarketing methods to stimulate the purchase. This is a conversion stage associated with collecting visitor's data and turning it into a lead status. Lead is a visitor who subscribed to the mailing list or registered on the site. In this case, the company will be able to personify offer, make a competitive proposal for lead to stimulating the purchase further. The next stage is "close to consumer", which is the transformation of lead into the consumer and making the purchase of the product by him. The main inbound marketing tool at this stage is the personalized e-mail distribution, although other CRM tools are also used for better consumer interaction.

The final stage of inbound marketing is a delight, associated with the transformation of the consumer into the promoter, which means repeated purchases due to consumer loyalty and growing ranking of the e-shop based on the recommendations of this consumer. The essence of inbound marketing techniques at this stage relates to improving the "call-to-action" elements and using special/personalized offers to generate re-purchases, as well as work through social networks to receive ratings and positive feedback about e-shop to stimulate new visitors.

Thus, inbound marketing techniques stimulate the e-shop visitor to purchase less irritatingly. In comparison with traditional marketing tools (outbound marketing), inbound marketing tools are more affordable for the company. It's good to use one of the most popular decision-making tools - a decision tree - to assess the existing alternatives of promotion e-shop (inbound marketing, outbound marketing or lack of promotion at all), which allows to schematically present a decision-making process on choosing the promotion tools. Let's assume that the decision-making process will take place at different market conditions. That's mean that the probability of occurrence of the result and consequences is known, in particular, the likelihood of a favourable market is 40:60. A favourable outcome when conducting marketing research increases the likelihood of a favourable market to 0.8, and unfavourable determines this probability at the level of 0.6. The criterion for the decision tree analysing is often the expected income for each alternative in a favourable or unfavourable market. An expert assessment of criteria is given in Table 4.

**Table 4. Expert assessment of expected income in different market conditions**

Alternatives	Market conditions, income in UAH	
	Favourable market (FM)	Unfavourable market (UM),
Using inbound marketing techniques	500 000	350 000
Using outbound marketing techniques	600 000	400 000
No promotion	50 000	

Source: developed by the authors.

Based on the data in Table 4, the authors built a decision tree that reflects the alternatives and the probability of different market conditions. The developed decision tree is presented in Figure 4.

It may be reasonable to conduct a marketing study of the target audience for many companies to identify touchpoints before choosing promotion techniques. Therefore, it is necessary to calculate the expected return on each probabilistic branch and select the branch, which allows maximizing income. Calculations are given in Table 5.

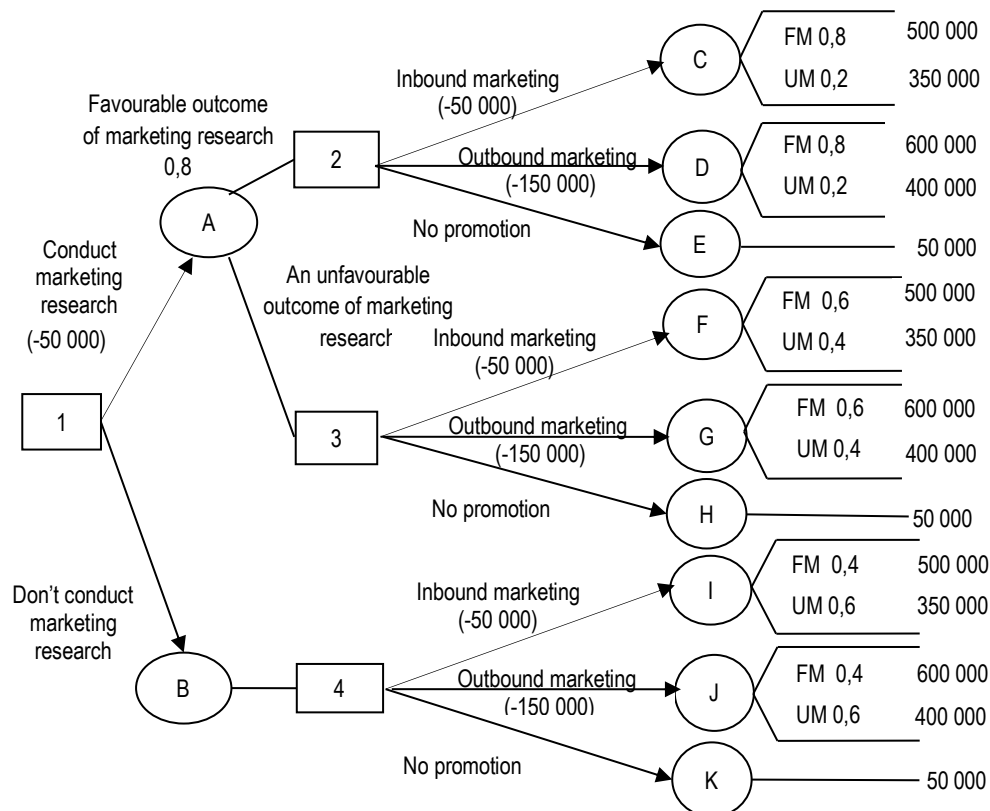


Figure 4. Decision tree for choosing techniques of e-shop promotion

Source: developed by the authors.

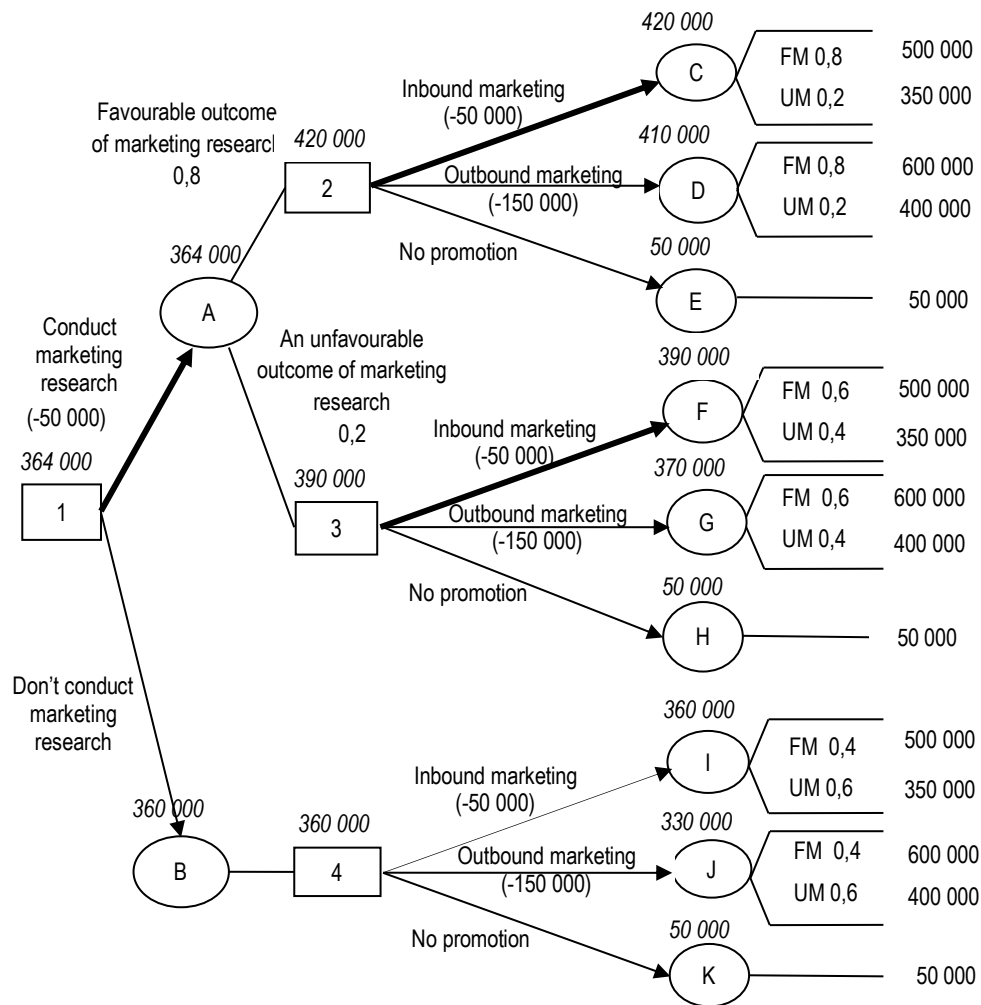
Table 5. Calculations of expected income after using promotion tools for each of the decision tree branches

Branch	Calculations of expected income (NE), UAH
C	$NE (C) = 0,8 * 500\ 000 + 0,2 * 350\ 000 - 50\ 000 = 420\ 000$
D	$NE (D) = 0,8 * 600\ 000 + 0,2 * 400\ 000 - 150\ 000 = 410\ 000$
E	$NE (E) = 50\ 000$
F	$NE (F) = 0,6 * 500\ 000 + 0,4 * 350\ 000 - 50\ 000 = 390\ 000$
G	$NE (G) = 0,6 * 600\ 000 + 0,4 * 400\ 000 - 150\ 000 = 370\ 000$
H	$NE (H) = 50\ 000$
I	$NE (I) = 0,4 * 500\ 000 + 0,6 * 350\ 000 - 50\ 000 = 360\ 000$
J	$NE (J) = 0,4 * 600\ 000 + 0,6 * 400\ 000 - 150\ 000 = 330\ 000$
K	$NE (K) = 50\ 000$
A	$NE (A) = 0,8 * 420\ 000 + 0,2 * 390\ 000 - 50\ 000 = 364\ 000$
B	$NE (B) = 360\ 000$

Source: developed by the authors.

Based on the calculations the final version of the decision tree is shown in Fig. 5, where the selected branches indicate chosen alternative according to the calculated possible income. Figure 5 shows that it

is reasonable to conduct marketing research and use the inbound marketing tools under certain conditions because they are cheaper, more accurate and littler used in the domestic market, which can create an additional competitive advantage for the e-shop. Such a model will give the possibility for the e-shop to get the maximum income in the amount of 364 000 UAH while spending only 50 000 UAH on marketing research. Consequently, inbound marketing does not require a lot of investment, as traditional tools, which makes it attractive for medium and small businesses with a small marketing budget.



**Figure 5. Choosing promotional techniques for e-shop by using decision tree**  
Source: developed by the authors.

**Conclusions.** The increasing amount of purchases through the digital channel forces companies to apply the latest promotional tools to win in the new competitive environment. The current focus on e-commerce is not only inherent for the hardware and mobile phones markets, but also for the infant nutrition market, where the number of e-shops is steadily increasing despite the poor quality of their service. Thus,

the main functional characteristics of infant nutrition e-shops have been investigated, the necessity and advisability of using inbound marketing techniques for improving the quality of service and effective promotion of e-shop have been argued. It is proved that inbound marketing is a purposeful continuous influence on a motivated audience by providing it with relevant and high-quality content, which significantly increases the likelihood of lead generation and conversion. Inbound marketing provides the opportunity to solve a specific problem, when consumers already require a product, and effectively removes the audience, which is not ready for conversion. Inbound marketing can lead with a relatively small audience to the increasing amount of transactions without significant investment growth. The inbound marketing toolkit provides not only effective promotion of goods but also contributes to increase the loyalty of the target audience and brands popularization. Among the further research, directions are lead- management, which deals with the Internet users of the company's web resources, the qualification and scoring of lead and the possibility of using inbound marketing tools for the promotion of non-commercial information resources.

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**Інбаунд маркетинг: прикладні аспекти просування товарів і послуг в e-commerce**

*У статті розглянуто особливості функціонування електронної комерції в Україні. Доведено, що діяльність інтернет-магазинів як важливих суб'єктів ринку електронної комерції є недостатньо врегульованою, а це призводить до незадоволення споживачами якістю сервісу в онлайн-середовищі. Обґрунтовано необхідність вироблення критеріїв, використання яких надасть змогу менеджменту інтернет-магазинів удосконалити сервіс й підвищити рівень задоволення цільових споживачів, насамперед на основі ефективного використання новітнього методу просування товарів і послуг в e-commerce – інбаунд маркетингу на прикладі сфери дитячого харчування. Здійснено рейтингове оцінювання функціональних характеристик українських інтернет-магазинів дитячого харчування за допомогою методів багатокритеріального аналізу, а саме методу COPRAS. Визначено, що функціональність і зручність користування інтернет-магазином – це основні критерії, які формують їх конкурентні переваги. Основна увага у статті зосереджена на обґрунтуванні просування інтернет-магазинів новітніми техніками інбаунд-маркетингу. Визначені особливості використання різного інструментарію інбаунд-маркетингу на кожному з етапів його проведення, які передбачають зміну статусу інтернет-користувача від відвідувача до промоутера. Наведений приклад оцінки існуючих альтернатив просування інтернет-магазину (інбаунд маркетинг, аутбаунд маркетинг чи відсутність просування взагалі). Зокрема, схематизовано процес прийняття рішення щодо вибору інструментів просування інтернет-магазину дитячого харчування на основі оцінювання альтернатив з використанням одного з найбільших поширених інструментів прийняття рішень – дерева рішень. Доведено економічну ефективність застосування інструментарію інбаунд маркетингу у порівнянні з інструментами аутбаунд маркетингу. Запропонований методичний підхід може бути використаний менеджментом інтернет-магазинів сфери дитячого харчування для розробки й обґрунтування управлінських рішень щодо оптимізації управління просуванням товарів і послуг та сприятиме підвищенню лояльності цільової аудиторії й популяризації брендів в e-commerce.*

Ключові слова: аутбаунд маркетинг, дерево рішень, дитяче харчування, електронна комерція, інбаунд маркетинг, інтернет-магазин, лід, метод COPRAS, просування.

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