The meaning of the “digital marketing management” concept that takes into account the role of customer impressions and emotional response as prerequisites for activating targeted actions is clarified. It is proved in the paper that one of the most important criteria of digital marketing management effectiveness is the formation of user impressions.

The issues of digital marketing management evaluation are generalized. It was found that modern methods of economic evaluation do not take into account the emotional component of content perception. It is proposed to introduce qualitative evaluation of impressions along with quantitative methods of digital marketing management. Digital marketing formats are systematized according to the ability to track customer feedback after interacting with a particular format. It was found that the most popular formats of digital marketing in 2021 were those that take feedback into account. In particular, companies spend their budgets for SMM – 75 %, banner advertising – 71 %, and for sharing they mostly choose social networks: Facebook – 88 %, Instagram – 78 %, Google – 75 % and YouTube – 1 %.

Methodical recommendations to substantiate the economic evaluation of digital marketing management are proposed. Based on the concept of impression economy, the method of assessing the impressions of users by reviewing their reactions on social networks is analyzed. SWOT analysis of user impressions is made, and it is proposed to choose digital content, which is more emotional.

The proposed methodological recommendations reflect the results of the effectiveness of digital marketing management both in quantitative (assessment of absolute and relative indicators) and qualitative forms (assessment of impressions).

Keywords: digital marketing management, economic evaluation, advertising campaign, SWOT analysis.

1. Introduction

The rapid spread of Internet coverage and the increase in e-commerce volumes have led to the development of digital marketing. The e-commerce market in Ukraine grew by 41 % in 2020, and this is the highest indicator among Central and Eastern European countries [1]. In such circumstances, enterprises must adapt to doing business in a digital format: carry out online trading and implement digital marketing. Digitization is the main factor in increasing the competitiveness of enterprises, which provides a number of advantages such as increased productivity, time saving, growing demand for new goods and services, etc. [2]. An important factor in the success of enterprises is the ability to quickly change the course of activity, adapt to the requirements of users. Businesses should abandon the traditional long-term approach to developing an advertising campaign in favor of speedy decision-making in the “information room” [3]. This is possible with rapid feedback analysis and effectiveness evaluation of digital marketing management.

With increasing competition on the Internet, there is a need to find new ways to establish contact with the target audience, one of which is to form impressions. Achieving emotional response from customers when interacting with digital content allows you to activate targeted actions. This approach is based on the concept of impression marketing, which has gained popularity in recent years [4, 5].

Given the need to rethink the functioning of enterprises in the digital age, it is considered relevant to improve methods of analysis and economic evaluation of digital marketing management.
management, taking into account the evaluation of user impressions.

2. Literature review and problem statement

The authors analyzed academic papers covering the issues of economic evaluation of digital marketing management, in which evaluation indicators are considered. In [6], the results of digital content management effectiveness evaluation based on quantitative parameters (average cost of consumer involvement, sales, average price per purchase) are considered. It is shown that the effectiveness of digital marketing management is influenced by the quality of content. But the issues related to measuring the emotional component of the content remain unresolved.

In [7], the authors emphasize the need to build trust between the company and users. This confirms the importance of creating content of impressions, which allows achieving an emotional response and establishing trust between the parties. However, the research does not explain how to form and track the dynamics of trust. In [8], the authors argue about the need to form a vivid user impression, which can be achieved using specific digital marketing formats, namely 3D advertising. It is not clear how the impressions will be assessed. The paper [9] is interesting, which analyzes qualitative indicators and reasonable factors influencing the purchasing decision of generation Y consumers. On the example of YouTube, the authors suggest taking into account user reactions to video content: the number of views, positive feedback, comments, negative feedback. However, the study does not provide recommendations for decision-making regarding the estimates obtained. In [10], the authors studied the results of customer communication management and came to the conclusion that customers’ reaction to communication with the company may differ depending on the age and gender of the audience, demographics, period of cooperation. Satisfaction with the quality of service, the quality of the company’s website, response to customer request time are the evaluation indicators. However, this approach does not fully reflect both quantitative and qualitative assessments of the effectiveness of digital marketing management.

In [11], it is proposed to compare the company’s KPI (key performance indicators) with those of Internet advertising (target audience, speed, cost). However, some indicators should be added. In [12], indicators are systematized by groups: e-commerce, lead generation, affiliate marketing, media advertising, SMM, PPC advertising, e-mail, startup. However, it is not clear how to combine all indicators. Too many indicators make the analysis process time-consuming. The time factor in the process of effectiveness evaluation of digital marketing management is extremely important [13]. Rapid response to user perceptions of content allows businesses to change the content and emotional components of content in a timely manner to satisfy the consumer and make an impression. Moreover, online communications are much faster than offline communications [14], and evaluation platforms allow you to process large amounts of data on consumer behavior and quickly assess the effectiveness of content [15].

The authors suggest that existing approaches to digital marketing management assessment are not sufficiently substantiated, as they do not reflect the qualitative component of the digital content perception. This could be handled by developing recommendations for assessing impressions.

3. The aim and objectives of the study

The aim of the study is to develop methodical recommendations for the economic evaluation of digital marketing management of the enterprise.

To achieve the aim, the following objectives were set:
– to clarify the meaning of the “digital marketing management” concept taking into account the role of impressions and emotional response of customers as prerequisites for activating targeted actions;
– to substantiate the method of economic evaluation of digital marketing management effectiveness based on the impression marketing concept;
– to test the methodical recommendations.

4. Research methods

The research was based on the following scientific methods: deduction and induction, measurement, analysis, comparison, synthesis, method of transition from the abstract to the concrete. The SWOT analysis is used to build a matrix of management decision-making.

5. Results of the study of the financial substantiation of digital marketing management effectiveness

5.1. Definition of the “digital marketing management” concept

Digital marketing means the full range of marketing activities in the modern world based on the transfer of digital content from the producer to the user. Communications happen through smartphones, interactive screens, tablets, computers, digital television, POS terminals, virtual windows, digital fitting rooms, etc. The paper [16] emphasizes the hybrid nature of digital marketing: “some functions are performed online and some offline. Digital marketing is derived from Internet marketing. If only one channel is used in Internet marketing, then the number of channels in digital marketing is quite large and will grow in the future” [16]. Digital marketing benefits businesses of all sizes by providing access to the mass market at an affordable price. It is noted in [17] that digital marketing is more profitable than conventional offline marketing. Unlike TV ads or billboards, it allows you to really personalize marketing [18]. The paper [19] presents the modern concept of MassCustomization, which, based on the use of combined online configuration frameworks, allows companies to be competitive in the mass market and effectively provide the end user with individual and innovative products. The main advantage of digital marketing is that the target audience can be reached in a cost-effective and measurable way [18, 20]. Empirical results [21] show regular assessment of digital marketing effectiveness and use of the obtained data to improve content propositions positively affect digital marketing effectiveness.

Digital marketing management means all kinds of marketing activities to form relationships with consumers using digital methods to create impressions and share content. Such activities are aimed at achieving emotional response from consumers and intensifying targeted actions. The main purpose of digital marketing management is to achieve the set goals within the implementation of basic management functions. When we clarify the definition of “digital mar-
marketing management”, we emphasize the role of customer impressions and emotional response as prerequisites for intensifying targeted actions. This understanding is based on the concept of impression marketing [4, 5]. The latter means that the content developer is the director of the show, and the users are the audience in the theater of impressions. Digital marketing management activities can be considered effective if they generate higher levels of cognitive, emotional and behavioral customer engagement throughout the customer’s path. This approach strengthens customer trust and creates a favorable attitude towards the brand, which will help the company achieve its business goals. It is proved in [21, 22] that management decisions on the formation of digital content affect its positive perception by potential audiences and, as a result, increase the number of customers.

5. 2. Method of economic evaluation of digital marketing management effectiveness based on the impression marketing concept

The authors propose the following stages of evaluation of digital marketing management effectiveness based on the impression marketing concept after the research of best practices of IT companies and multimedia publishers.

At the first stage, it is necessary to set the goals of digital marketing management. Goal setting happens at the planning stage. Goal setting should be based on the Objectives and Key Results (OKR) model. This model calls for not only management to define the company’s goals, but employees as well. Such goal management is transparent, cooperative, and up-to-date [23]. The key difference between the OKR model and the to-do list is that instead of following strict rules, employees are given carte blanche to implement their ideas, which leads to better outputs. The goal is achieved by assessing 3–4 key results. Key results should be ambitious, feasible and quantifiable through objective assessments. The process of streamlining the possible goals of digital marketing management is difficult.

The second stage involves the choice of digital marketing formats to achieve the goals and creating relevant content. In [24], the need to determine which topics are of interest to the target audience, the optimal length of content for readers and type of digital content that suits their needs is considered. This will enable content producers to optimize the path from content consumption to receiving interested customers and increase the effectiveness of digital content.

The digital marketing formats are presented in Table 1 according to their ability to process customer feedback. Most formats provide specially designed performance analysis systems, for example, Google Analytics for websites and contextual advertising, for social networks pages there is a statistics tab. There are no special analysis systems for contextual advertising, for social networks pages there are no special analysis systems for other formats.

The most popular formats of digital advertising among enterprises in 2021 were SMM – 75 % and banner advertising – 71 %, and they share it mostly on social networks such as Facebook – 88 %, Instagram – 78 %, Google – 75 % and YouTube – 71 % [25]. SMM budget was increased by 33 % and Search – 31 %, almost the same increase is planned in 2022 for SMM (27 %) and reduction for Search – only 18 %. At the same time, new formats such as virtual fitting rooms, 3D tours of the organization, 3D advertising [8], AR, VR, social selling seem interesting to users [26, 27]. The integrated social selling format involves the production of regular expertise content in storytelling formats with a story about personal and company’s experience, instructions, checklists, cases, short videos (1–3 posts per week). The choice of digital marketing channels should be studied separately. It should be kept in mind that the more digital formats the company uses, the greater the effectiveness of digital marketing due to the hypermedia nature of content distribution [16].

**Table 1**

<table>
<thead>
<tr>
<th>Digital marketing formats</th>
<th>Formats with feedback tracking ability</th>
<th>Formats with no feedback tracking ability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content marketing (publications on thematic websites, blogs, etc.); email marketing; SMM; targeted advertising on social networks; contextual advertising; media advertising; SEO; affiliate programs; company website; audio and video advertising (advertising in podcasts, online radio, etc.); messenger marketing (advertising using chatbots in messengers); influencer marketing; social selling (practice of using brand’s social media channels to connect with prospects); mobile applications; RTB (Real Time Bidding); re-marketing; retargeting; viral marketing</td>
<td>Augmented reality (AR); virtual reality (VR); mixed reality (MR); mobile marketing (SMS, MMS)</td>
<td></td>
</tr>
</tbody>
</table>

Evaluation of impressions happens on the third stage. We suggest using the funnel method. This allows you to select the content that creates the impression (qualitative component), and then assess its economic impact on the financial results of the enterprise (quantitative component).

In the first step, the content is evaluated by the developers themselves, in the second – users. The impressions during the development and perception of the material may differ. It is suggested to use the HappyorNot survey methodology based on a variety of computer icons (smileys, emojis) to evaluate impressions. The impressions and corresponding smileys/reactions are presented in Table 2.

**Table 2**

<table>
<thead>
<tr>
<th>Impressions</th>
<th>Variety of reactions</th>
<th>Emotions</th>
<th>Digital scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>The most positive impressions, wow effect</td>
<td>Love, laughter, admiration, care</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Positive impressions</td>
<td>Approval</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Neutral impressions or their absence</td>
<td>No reaction</td>
<td>Lack of emotions</td>
<td>2</td>
</tr>
<tr>
<td>Negative impressions</td>
<td>Sadness, anger, dissatisfaction</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

The next step is to enter the response to digital content in the SWOT analysis matrix. A SWOT analysis matrix of impressions from digital content on Facebook is presented in Table 3.
The paper [4] presents 4 forms of theater that companies can use to stage the show. The research proposes to adapt 4 forms of theater for staging shows while developing digital content. Businesses that focus on impressions go through four forms of theater: invention or individual content (improvisation theater); mass content (stage theater); constantly improving content (harmonized theater); mass-personalized content (street theater). Mass-personalized content offers maximum benefit. If the company is unable to meet customer needs, it must return to the invention through upgrades and build its capacity. To find the content in the “street theater” format, companies are recommended to experiment with meeting user needs in four areas [4]: education, entertainment, economy, aesthetics.

Posts with a response of “4” should be included in the “Strengths, opportunities” column. The content has strengths, it is interesting and evokes strong emotions. In addition, this column should include posts that cause positive comments and reposts. Posts included in this column should be published and distributed through various sources, as well as stimulate similar posts in the future. This corresponds to the “street theater” form [4] and allows you to implement mass-personalized content.

Posts with a response of “3” should be included in the “Strengths, threats” column. The content has strengths, it is interesting, but it does not evoke strong emotions. This content corresponds to the form of individual, harmonized or stage theater. This, in turn, carries the risk of losing user interest. Such posts should be refined and improved in terms of content and design. In [4], it is proposed to make an “intermission” in the show and offer new content and new experiences.

Posts with a response of “2” should be included in the “Weaknesses, opportunities” column. The content has weaknesses, it is not interesting and does not cause emotions. There is an opportunity to redirect efforts to improve performance in columns 3 and 4. Such posts should not be improved, as it is a waste of time.

Posts with a response of “1” should be included in the “Weaknesses, threats” column. The content has weaknesses, it evokes negative emotions. This poses a threat to developers, as it can negatively affect the company’s image. Such posts should be deleted and not repeated in the future.

At the stage of digital content evaluation, the developer should save posts with ratings of 3 and 4 for publication.

Then the analysis funnel narrows. User feedback should be assessed. The method of interpreting the user reaction is similar. Of the total number of posts, those with grades 3 and 4 should continue to be improved.

On the fourth stage, indicators for the economic evaluation of digital marketing management are developed. It is recommended to use two groups of indicators: relative and absolute (Table 4).

### Table 3

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>4: Approving comments, reposts;</td>
<td>2</td>
</tr>
<tr>
<td>Threats</td>
<td>3</td>
</tr>
</tbody>
</table>

### Table 4

<table>
<thead>
<tr>
<th>Group</th>
<th>Evaluation indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative</td>
<td>CTR, CTB, CTI, ROI</td>
</tr>
<tr>
<td>Absolute</td>
<td>CPC, CPA, CPS</td>
</tr>
</tbody>
</table>

1. CTR (Click-through rate) – clickability of advertising:

\[
\text{CTR} = \left( \frac{\text{Clicks}}{\text{Impressions}} \right) \times 100 \%
\]

**Number of clicks.** In digital marketing, a click happens when a user clicks on a banner or other advertising medium in order to visit the advertised website.

During the advertising campaign, each user can get interested in the advertisement and visit the advertiser’s website as many times as desired. Therefore, in order to get an idea of the audience’s interest, you need to consider the number of unique clicks.

2. CTB (Click to buy ratio) – conversion of advertisement:

\[
\text{CTB} = \left( \frac{\text{Number of buyers}}{\text{Total number of visitors}} \right) \times 100 \%
\]

3. CTI (Click to interest) – indicator of online advertising effectiveness measured as a ratio:

\[
\text{CTI} = \left( \frac{\text{Number of interested visitors}}{\text{Total number of visitors}} \right) \times 100 \%
\]

A website visitor is the one who visited several tabs or returned to the site again, or remembered the address of the website and the fact of its existence.

4. CPA (Cost per action) is the cost of the target action. This indicator is similar to the previous one. The difference is that in this case one can estimate how much advertising costs per action.

\[
\text{CPA} = \frac{\text{Advertising costs}}{\text{Number of clicks}}
\]

5. CPS (Cost per sale) determines how much is spent on a certain number of sales.

\[
\text{CPS} = \frac{\text{Advertising Cost}}{\text{Sales}}
\]

6. ROI (Return on investment):

\[
\text{ROI} = \frac{\text{Gross profit from DM - Investments in DM}}{\text{Investments in DM}} \times 100 \%
\]

DM – digital marketing.

5.3. Testing of methodical recommendations on the evaluation of digital marketing management effectiveness

Digital content with scores of 3 and 4 was included in the “Strengths and Opportunities”, “Strengths and Threats”
columns in the SWOT analysis matrix of impressions. Then an advertising campaign was implemented. Data were collected based on the results of the advertising campaign using the following digital marketing formats to calculate the digital marketing management effectiveness (Table 6).

| Table 6 |
| Data on the advertising campaign implemented with digital marketing |

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Contextual advertising on Google</th>
<th>Contextual advertising on Yandex</th>
<th>Targeted advertising on Facebook</th>
<th>Advertising on sptovarov.com forum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of impressions</td>
<td>180,000</td>
<td>88,000</td>
<td>2,000,000</td>
<td>3,000,000</td>
</tr>
<tr>
<td>Number of clicks</td>
<td>11,475</td>
<td>7,195</td>
<td>8,234</td>
<td>4,176</td>
</tr>
<tr>
<td>Number of unique clicks</td>
<td>7,168</td>
<td>3,947</td>
<td>4,382</td>
<td>1,847</td>
</tr>
<tr>
<td>Number of visitors</td>
<td>10,756</td>
<td>7,008</td>
<td>74,15</td>
<td>4,118</td>
</tr>
<tr>
<td>Number of interested users</td>
<td>9,856</td>
<td>5,786</td>
<td>5,832</td>
<td>2,471</td>
</tr>
<tr>
<td>Cost of advertising message, rubles</td>
<td>249,000</td>
<td>125,000</td>
<td>27,000</td>
<td>26,000</td>
</tr>
<tr>
<td>Number of sales</td>
<td>495</td>
<td>348</td>
<td>160</td>
<td>189</td>
</tr>
<tr>
<td>Number of buyers</td>
<td>99</td>
<td>58</td>
<td>32</td>
<td>27</td>
</tr>
<tr>
<td>Sales volume, UAH</td>
<td>299,800</td>
<td>175,000</td>
<td>96,300</td>
<td>91,500</td>
</tr>
</tbody>
</table>

Based on these data, digital marketing management effectiveness was measured (Table 7).

| Table 7 |
| Indicators values of digital marketing management efficiency for individual digital marketing formats |

<table>
<thead>
<tr>
<th>Type</th>
<th>Indicator</th>
<th>Contextual advertising on Google</th>
<th>Contextual advertising on Yandex</th>
<th>Targeted advertising on Facebook</th>
<th>Advertising on sptovarov.com forum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative</td>
<td>CTR, %</td>
<td>6.38</td>
<td>8.18</td>
<td>0.41</td>
<td>0.14</td>
</tr>
<tr>
<td></td>
<td>CTB, %</td>
<td>0.92</td>
<td>0.83</td>
<td>0.43</td>
<td>0.65</td>
</tr>
<tr>
<td></td>
<td>CTL, %</td>
<td>91.6</td>
<td>82.6</td>
<td>78.65</td>
<td>60</td>
</tr>
<tr>
<td>Absolute</td>
<td>CPC</td>
<td>21.7</td>
<td>17.4</td>
<td>3.28</td>
<td>6.2</td>
</tr>
<tr>
<td></td>
<td>CPA</td>
<td>503</td>
<td>359</td>
<td>168.8</td>
<td>137.6</td>
</tr>
<tr>
<td></td>
<td>CPS</td>
<td>0.83</td>
<td>0.71</td>
<td>0.28</td>
<td>0.28</td>
</tr>
</tbody>
</table>

Return on investment is calculated as the most important efficiency indicator to determine the effectiveness of digital marketing management of the enterprise. This indicator was calculated both for the general advertising campaign and for its individual formats (Table 8).

| Table 8 |
| Return on investment calculation |

<table>
<thead>
<tr>
<th>Internet advertising tool</th>
<th>Costs</th>
<th>Profit</th>
<th>ROI, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contextual advertising on Google</td>
<td>249,000</td>
<td>299,800</td>
<td>20.4</td>
</tr>
<tr>
<td>Contextual advertising on Yandex</td>
<td>125,000</td>
<td>175,000</td>
<td>40</td>
</tr>
<tr>
<td>Targeted advertising on Facebook</td>
<td>27,000</td>
<td>96,300</td>
<td>256.6</td>
</tr>
<tr>
<td>Advertising on the sptovarov.com forum</td>
<td>26,000</td>
<td>91,500</td>
<td>251.9</td>
</tr>
</tbody>
</table>

Upon completion of the calculations, we can conclude that the digital marketing management of the enterprise is sufficiently effective. ROI of 30 % or more indicates effective digital marketing management.

6. Discussion of the results of research on the digital marketing management effectiveness

High values of digital marketing management effectiveness indicators are obtained. The return on investment is 55.2 %, indicating that the costs of the advertising campaign are covered. The ROI was calculated both for the general advertising campaign and for its individual formats (Tables 7, 8). The results are explained by the preliminary selection of emotional content based on the assessment of impressions (Table 2) and the subsequent management decision-making based on the SWOT analysis matrix (Table 3).

The peculiarities of the proposed guidelines are the use of the impression marketing concept in digital marketing. In contrast to [2, 12, 17], not only quantitative indicators, but also qualitative ones (impressions) are analyzed. 4 forms of theater for staging shows were adapted in the development of digital content. Particular attention is paid to assessing user impressions and decision-making with the help of SWOT analysis.

This study has the following limitations. First, different types of reactions on social networks should be considered. The distribution of reactions in the SWOT analysis matrix is different for each social network. Second, the time period of the assessment should be set in accordance with changing trends in the industry. Some industries have rapid trend changes, so the assessment should be done more often. On the opposite, for industries where the situation regarding tastes, values, interests, changes in trends is mostly stable, the assessment may be less frequent.

The shortcomings of the study include incomplete justification of the impact of the digital marketing management effectiveness on the financial performance of the company. It would be interesting to conduct dynamic studies and track the nature of the relationship between them.

In future research, the guidelines for assessing impressions from different digital marketing formats could be developed.

7. Conclusions

1. The “digital marketing management” concept that emphasizes the role of impressions and emotional response of customers as prerequisites for intensifying targeted actions is clarified. This clarification is based on the concept of impression marketing.
2. The method of economic evaluation of the digital market- ing management effectiveness based on the concept of impression marketing is considered. Impressions are gained in a fluid, global, diffused way, and impressions and a variety of smileys/reactions are collected. A SWOT analysis matrix of impressions from digital content on the example of Facebook has been developed to separate digital content from the least to the most emotional. Digital content is presented in the SWOT analysis matrix on the basis of which management decisions are made regarding the selection of content. After the evaluation of impressions, the economic evaluation of digital marketing management is carried out according to the developed system of indicators.

3. Testing of methodical recommendations was carried out. Analysis of the economic evaluation of digital marketing management of the enterprise allows us to make positive conclusions. A high value of 55.2% of the return on investment was achieved. But this result does not apply to all digital marketing formats used. High results of contextual advertising on Yandex and insufficient efficiency on Google were revealed. Poor results are caused by the incorrect choice of keywords when composing an advertising message, improper regions and display time, unemotional content. As for other digital marketing formats, they are effective, but give low clickability.

References


