



Article

Evaluation of Advertising Campaigns on Social Media Networks

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Abstract: As the virtual environment is constantly changing, not only users' informational and knowledge needs but also the means and channels of communication with customers applied by organizations change. There is a noticeable trend to move more and more advertising campaigns to social media networks because of the opportunities they provide to organizations and users, which results in the ever-increasing popularity of social media networks and a number of their users. Such a transition is explained by one of the main objectives organizations have: to inform their customers in an appropriate way and receive feedback on social media networks, which is difficult when traditional advertising channels and means are applied. Since advertising campaigns on social media networks are evolving rapidly, their assessment factors and methods, which receive controversial opinions in both scientific literature and practice, change too. Researchers assess and interpret the factors that influence the effectiveness of advertising campaigns on social media networks differently. Thus, a problem arises: how should we evaluate which approach is more capable of accurately and fully reflecting and conveying reality? In this research, this problem is studied by connecting approaches of different researchers. These approaches are linked to the effectiveness assessment of advertising campaigns on social media network aspects. To achieve the objective of this study, such research methods as analysis of scientific literature, multiple criteria and expert assessment (a structured survey and an interview) were applied. During the study, out of 39 primary assessment factors, eight primary factors that influence the effectiveness of advertising campaigns on social media networks were identified: sales, content reach, traffic to website, impressions, frequency, relevance score, leads and audience growth.

Keywords: advertising campaigns; social media networks; evaluation

1. Introduction

The popularity and versatility of social networks allows organizations to reach their chosen target audience and, by using appropriate marketing and communication tools, not only convey information, but also establish relationship with customers, create a dialogue and offer products (services) that suit their individual and constantly changing needs best. The popularity of social networks can be explained using data provided by Digital Information World (2017): the total population of the world is 7.476 billion people, of which 3.773 billion of are internet users, 2.789 billion are active social media users, 4.917 billion are unique mobile users and 2.549 billion are active mobile social users. Facebook social media network has 1.871 billion active users, YouTube has 1 billion, Instagram has 600 million, Twitter has 317 million and LinkedIn has 106 million [1].

Advertising campaigns on social media networks create prerequisites for organizations to not only inform users more effectively, understand their changing informational and knowledge needs, receive feedback, observe users' interest and involvement into activities carried out by organization and products (services) provided, but also bring about certain challenges: how to evaluate the effectiveness of advertising campaigns on social media networks and how to improve these campaigns in a constantly dynamic environment. In such a situation, a few problems are faced: how should we effectively evaluate advertising campaigns on social media networks? In what way are the approaches of researchers and practitioners controversial? Scientific studies lack a complex approach due to the novelty and dynamism of the subject studied.

Therefore, the study examines the complexity of the assessment of effectiveness of advertising campaigns on social media networks, when assessment approaches, factors and criteria change in the dynamic environment. Researchers evaluate and interpret the factors that influence the effectiveness of advertising campaigns on social media networks differently.

The objective of this study is to identify key factors that influence the effectiveness of advertising campaigns on social media networks. To achieve this objective, such research methods as analysis of scientific literature, multiple criteria and expert assessment (a structured survey and an interview) were applied.

The main results obtained in this study are 39 primary factors that influence the effectiveness of advertising campaigns on social media networks identified through the analysis of scientific literature. During the international expert evaluation, eight factors were selected as crucial and, after applying the principles of multiple criteria assessment, the criteria of the primary assessment factors and their values and significance were determined. The results of the study provide preconditions for evaluating advertising campaigns on social media networks applied by various organizations and formulate suggestions to improve them.

2. Theoretical Assessment Aspects of Advertising Campaigns on Social Media Networks

Social media networks have become the study subject of such disciplines as anthropology, ethnology, sociology, social psychology, psychoanalysis, management and marketing. A social media network can be defined as a system of connections, a network of communication, a strategy used by individuals, a form of social relationships, a virtual communication environment and a form of communication used to realize different objectives [2–7].

When examining social media networks from the context of management and marketing disciplines, such crucial objectives as improving the image of the organization and/or the product (service), encouraging users to share the content of the advertising campaign, reducing marketing costs and promoting sales are raised for the social media networks [8,9].

Researchers and practitioners argue that the prevalence of social networks is related to the opportunity of attracting as many people as possible, identifying the audience, speeding up the processes of information spread and storage, increasing interactivity, establishing relationships and improving image, and increasing visibility [6,10–31].

Researchers point out such benefits of social media networks provided to users as encouraging them to be active on social media networks, creating and sharing content that is information-oriented, which brings about preconditions to discuss daily concerns with each other [28]. On the social media network, information spreads rapidly through the importance of relationships and frequency of communication. On social networks, individuals seek to obtain new skills and self-expression [32], create communities, establish relationships based on their interest groups, exchange information of various levels, and therefore advertising campaigns are especially relevant to certain audiences [2].

Due to their large number of users, social networks encourage organizations to change their advertising campaigns, adapt to changing users' informational needs and new forms and platforms of social networks [31]. According to individual interests and self-expression needs, social networks can be divided into many different groups: when an individual checks their favourite photographs

or visual material ("Pinterest", "StumbleUpon", "FlipBoard", "Diigo"); shares videos and follows other users on the network ("Instagram", "YouTube", "Flickr"); creates blogs ("Tweetpeek", "Twitxr", "Plurk"); finds useful information at the desired location and time ("Yelp", "Google", "Healthgrades"); participates in discussion forums and platforms ("Phorum", "Meeb", "Skype", "Talk"); broadcasts videos ("Justin.tv", "Listream.tv"); establishes and maintains relations, expresses oneself ("LinkedIn", "Facebook", "YouTube", "Google+", "Twitter", "Instagram") [22].

The authors of this article define an advertising campaign on social media networks as a means of communication of a specific length with a target user applied by an organization that seeks to inform, motivate, persuade or influence the target audience for the purpose of achieving organization's communication aims and using appropriate social networks and their platforms to do that.

Researchers and practitioners examine how advertising campaigns on social media networks provide opportunities for the organization and its customer. Organizations are empowered to appropriately inform and reach the customer, attract their interest and encourage them to actively share their experience on a social media network, discuss, get to know the customer, maintain a long-lasting relationship with the customer, develop those relationships, meet consumers' individual needs and establish mutual value. Social networks have helped organizations adapt their content of advertising to the needs of individual customers and personalise advertisements and have also enabled the customer to manage the qualitative and quantitative parameters of advertising (content, length, time, place, etc.) to some extent [3,6,26,33–42].

Advertising campaigns on social media networks can be categorized according to many attributes. One of which, according to the our objective, is increasing awareness, forming the image of the organization, improving brand image, sales promotion, knowing the customer better, maintaining the relationship with the customer, increasing consumer engagement, generating consumer traffic to other online media tools, reducing marketing expenses, and others [8,9]. Organizations can observe and analyse customer feedback (comments, reviews) and determine which associations their actions establish in a customer's consciousness and see whether the organization applies appropriate positioning strategies.

Based on the analysis of scientific literature, it is possible to compare traditional advertising campaigns with those applied on social networks according to content, format, length, tools applied, audience reach, return aspects and others [19,43–49]. Advertising campaigns on social media networks are exceptional because of the fast reach of broad target audience, content marketing and interactivity. Content marketing can be defined as a tool which allows useful and value-creating content to be created and distributed with the aim to attract and maintain a particular target audience. Interactivity is a means of communication feature that allows constant mutual exchange of information between the sender and the recipient. The customer can select, manage, integrate and format the message by controlling the interactivity of means of communication. Two-way communication can increase the effectiveness of the message sent, as the sender can improve the faults of the advertising campaign due to the received feedback [45].

In scientific literature, factors that influence the effectiveness of advertising campaigns on social media networks are evaluated differently [6,27,32,50–53].

Sterne (2010) suggests evaluating the effectiveness of advertising campaigns on social media networks according to such assessment factors as subscriptions, downloads, invitations, recommendations, message frequency, time spent on site, views, followers, ratings, reviews, comments, etc. [50].

Rautio (2012) suggests such assessment of the effectiveness of social media networks criteria as website/traffic metrics (unique visitors, page views, time spent, installs, lifetime), online advertising metrics (cost per click, cost per impression, click through rate, conversion, campaign reach, social reach), social media & engagement metrics (likes, followers, people discussion, mentions, retweets, weekly total reach, engaged users, virality, comments). To estimate the effectiveness of such assessment criteria, the author suggests using return on investment (ROI) and profit investment ratio [51].

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Jayaram et al. (2015) distinguishes such assessment factor groups as content management (dynamic personalization, multi-media, localization, user-generated content, quick response codes, quality management), social media (collaboration, integration with other applications, sentiment analyses, word of mouth), digital collaboration (blogs, live chat), analytics of successful digital marketing (data and content, big data, user data, sensor data, datamining, visualization, statistical techniques, prediction algorithms, prescriptive intelligence) [52].

Killian et al. (2015) examine the aspects of consumer relationship maintenance and mentions such key assessment factors on social networks as perception of customers' needs, the development of customer relationships, understanding what encourages consumers to connect, customer attraction through creativity, capturing and holding customer attention through engagement and entertainment (contests, games and other forms). Researchers also emphasize the significance of interactivity that brings about preconditions for the customer to control such aspects of communication as time, content and communication channel [32].

Albarran (2016) identifies key assessment groups based on such key performance measure criteria as financial aspects, audience reach, awareness and content management [53].

Liu et al. (2016, 2017) highlight the effectiveness assessment aspect of the dialogue between the business and the customer and suggest evaluating it according to the distribution of the brand (the ratio of the number of brand references to the number of trademarks and competitors mentioned), consumer engagement (the ratio of the number of reviews, the number of shares and the number of comments to the total number of views), talking about this (the ratio of the number of times the brand was mentioned to the total number of users) [6,27].

Based on the analysis of scientific literature and practitioners' insights, 39 factors that influence the effectiveness of advertising campaigns on social media networks suggested by researchers and practitioners were identified for further research [6,27,32,43,50–68]: audience growth, sales, content reach, traffic to website, impressions, frequency, relevance score, leads, feedback, cost of leads, relative market share, sentiment, time spent on site, mobile customer relationship management, new users, revenue growth rate, audience profile, views count, the number of clicks on social networks, a company's reputation, hashtags, target audience engagement, conversions, engagement by content type, posts per day, cost per action, cost per click, click-through rate, number of orders mentioned, cost per thousand, sessions from social networking sites, customer profitability score, response rate & quality, talking about the topic, amount of remarks, customer potential, return on investment, gross impressions, number of repeat visitors. In order to evaluate the 39 primary assessment factors that influence the effectiveness of advertising campaigns on social media networks suggested by researchers and practitioners, multiple criteria and expert assessment methods were applied. They brought about preconditions not only to identify key factors but also to evaluate the effectiveness of the advertising campaign and to select the criteria of assessment factors, their values and significance.

3. Research Methodology of Advertising Campaigns on Social Media Networks

The multiple criteria assessment method was chosen to evaluate the complexity of the factors that influence advertising campaigns on social media networks and obtain more objective and higher quality evaluation results. This creates preconditions to seek for integrated and structured assessment approaches. Applying them gives the opportunity to evaluate the subject of the research and formulate suggestions for elimination of problematic areas [69–75]. Using the multiple criteria method allows us to quantitatively evaluate any complicated phenomenon expressed by most indicators. These assessment methods combine qualitative (expert assessment, a survey, an interview) and quantitative approach combinations: expert knowledge and implementation of mathematical analysis methods. By applying the complex multiple criteria assessment method, preconditions to implement an alternative comparative analysis and select such alternatives, which have the highest integrated criterion estimate, are created.

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Using the multiple criteria method, a list of primary assessment factors was compiled from the scientific literature resources. It was transmitted to the international experts for clarification. International experts were selected based on such attributes: competence in creating, implementing and assessing advertising campaigns on social media networks; longer than a 3-year experience in the area studied. The international expert assessment was carried out in December 2017 and January 2018 and took place in two stages.

In the first stage, the aim was to evaluate the effectiveness of the factors identified in scientific literature that influence the advertising campaigns on social media networks by applying a structured survey method (83 international experts took part in this stage). The structured survey provided the assessment factors of advertising campaigns on social media networks. The experts were asked to assess the significance of these factors in the scale [1, 5], where 1 stands for an unimportant factor, 2 means a more unimportant than important factor, 3 means a factor that is neither important nor unimportant, 4 means more important than unimportant, and 5 stands for important. In the structured survey, the experts were also asked to indicate the average duration of advertising campaigns on social networks, the average monthly budged of the advertising campaign, the number of loyal customers, the average time spent to evaluate the effectiveness of the advertising campaign, the problems that are encountered when evaluating advertising campaigns on social networks, methods and tools to evaluate the campaigns.

In the second stage, the interview method was chosen to implement expert evaluation in order to clarify the framework of factors, their assessment criteria and normalized values and significance (10 international experts took part in this stage).

4. Results of the Research on Advertising Campaigns on Social Media Networks

83 international experts (15 from Lithuania, 12 from Russia, 11 from Slovenia, nine from Latvia, nine from Estonia, seven from Poland, six from Serbia, five from Macedonia, four from the Czech Republic, three from Kazakhstan and two from Croatia) took part in the first stage of the study. 60% of them have more than five-years' experience of implementing and assessing advertising campaigns on social networks, 18% from four to five years and 22% from three to four years. Most experts (58%) indicated that the average advertising campaign on social network lasts for more than 30 days, 22%—from 15 to 30 days, 12%—from eight to 14 days and 8%—up to 7 days. Study results show that an advertising campaign on social media networks usually lasts for more than 30 days (Figure 1a).

Experts say that the budget for advertising campaigns on social media networks depends on the strategy each organization has and the specific nature of their activity. Most experts (68%) on average spend more than 1000 EUR on an advertising campaign on social networks, 24%—from 500 to 1000 EUR and the remaining 8% spend less than 500 EUR (Figure 1b).

More than half of the experts (54%) noted that advertising campaigns on social media networks have more than 7000 loyal users on social networks: 16%—from 5000 to 7000 loyal users, 17%—from 2500 to 5000 users and the remaining 13%—less than 2500 users. The study found out that the greater the expert's experience in leading advertising campaigns on social media networks is, the larger number of loyal consumers on social networks they have (Figure 1c).

For most experts (64%) it took from two to three work days to assess the effectiveness of an advertising campaign on social media networks: 22%—from 4 to 7 work days, 12%—more than a work week and only 2% managed to assess the effectiveness of the campaign in one work day. Study results show that quite much time and effort is spent on assessing the effectiveness of an advertising campaign (Figure 1d).

Experts highlighted that, when assessing the effectiveness of advertising campaigns on social media networks, they encounter the problem of the non-existence of a universal tool, and that is why they integrate such tools as Facebook Ads Manager (100%) and Google Analytics (59%). According to experts, the Facebook Ads Manager platform does not estimate the conversions and sales accurately, while orders can only be seen on Google Analytics platform, but there is also a problem that declined

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orders are also counted. Due to the reasons mentioned, 64% of experts apply assessment systems compiled by the organization or themselves, because there is a need to receive precise information of how many users saw the advertising campaign, how many of them purchased the product (service) offered by the organization, how many of them shared the message, and other aspects. Such assessment systems pay most attention to the implementation of the plan, number of sales, and the payback of the advertising campaign.

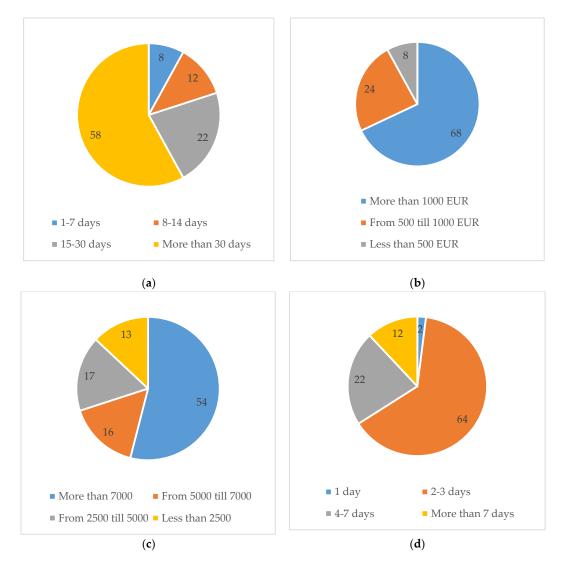


Figure 1. (a) Average advertising campaign duration (days) on social networks (percentage); (b) Average social media advertising campaign budget (euros) per month (percentage); (c) Average number (percentage) of loyal users at the time of advertising campaign on social media networks; (d) Average duration (days) for evaluating the effectiveness of advertising campaign on social media networks (percentage), created by the authors.

From 39 primary assessment factors, experts have highlighted the key factors for evaluating the effectiveness of advertising campaigns on social media networks: sales (4.84), content reach (4.65), traffic to website (4.64), impressions (4.63), frequency (4.60), relevance score (4.57), leads (4.10) and audience growth (3.64), while the least important are gross impressions (1.88) and number of repeat visitors (1.88) (Figure 2).

For detailed research, in the second stage, the 10 most experienced experts with more than five-year experience in the field from the 83 experts who participated in the structured survey were

chosen: seven experts from Lithuania, one from Latvia, one from Estonia and one form Slovenia. They all represent the biggest international organizations that use advertising campaigns on social media networks. Expert assessment was conducted by applying multiple criteria and interview methods to determine the key factors and criteria that influence the effectiveness of advertising campaigns on social media networks, their normalized values and significance.

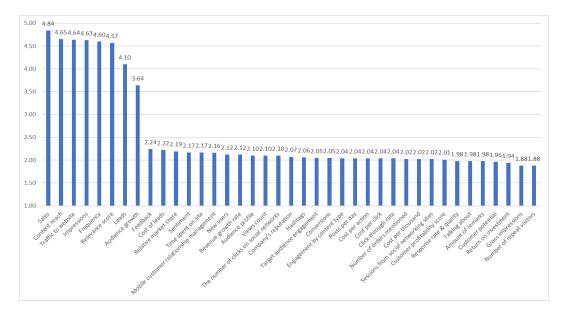


Figure 2. A summary of the assessment factors of advertising campaigns on social media networks [1, 5] (created by the authors).

The experts have selected eight key factors that influence the effectiveness of advertising campaigns on social media networks: sales (4.84), content reach (4.65), traffic to website (4.64), impressions (4.63), frequency (4.60), relevance score (4.57), leads (4.10) and audience growth (3.64). The experts have pointed out that social networks offer two different types of advertising campaigns: sales-oriented and image-forming. Eight key factors selected are a part of the sales-oriented campaign assessment. These factors are important only for organizations that own an online shop. By using the online shop data it is possible to observe and assess these factors and their criteria.

After determining the factors that influence the effectiveness of advertising campaigns on social media networks, experts normalized the values of each factor criterion on the scoring scale from [1,3], where 1 is low, 2—average, 3—high criterion value (Table 1).

According to experts, sales are a significant and derivative factor in advertising campaigns, since they bring about prerequisites for an accurate evaluation of the effectiveness of advertising campaign. Content reach shows the success of communication, since the social media algorithm works on the principle that interesting and engaging content, which grabs the user's attention, is more visible in the news thread and is shown to an even broader audience of potential customers for free. This factor shows the prevalence of advertising campaigns on social media networks and the number of individuals who saw the advertising campaign. The traffic to website factor is associated with user traffic, audience engagement and their attraction to the site, when a sufficient number of visitors is transferred to diverse conversion campaigns (for example, the ratio of customers who put an item into their basket to customers who purchased it, or from completing the request to subscribing to a newsletter). Impressions are the number of times the advertising campaign was shown. Frequency shows how many times on average the advertisement was shown to social media users. Relevance score level is a "Facebook Ads Manager" indicator. The Facebook algorithm compares an advertising campaign to other advertisements in the market and evaluates how relevant it is to the target audience on a scale from 1 to 10. Depending on this indicator, decisions are made on content, text corrections,

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etc. Leads factor is associated with sales promotion, when potential customers are offered an attractive gift or added value (for example, e-books, discounts) in exchange for their contact information (e-mail address, phone number). Audience growth factor depends on the content and the attractiveness of the message that is sent to the potential audience of the organization, as well as the added value offered (for example, promotions, discount coupons, free delivery, etc.).

Table 1. The normalized values of primary assessment criteria that influence the effectiveness of advertising campaign (created by the authors).

Factor		Value				
	Criterion -	1 (low)	2 (average)	3 (high)		
Sales	Sales value/investment (%)	From 0 to 120	From 121 to 200	More than 200		
Content reach	Number of customers reached	From 0 to 40,000	From 40,001 to 120,000	More than 120,000		
Traffic to website	Number of clicks	From 0 to 1000	From 1001 to 6000	More than 6000		
Impressions	Number of impressions	From 0 to 50,000	From 50,000 to 200,000	More than 200,000		
Frequency	Number of advertisements shown	More than 10	From 4 to 10	Less than 4		
Relevance score	Special assessment of system	From 1 to 3	From 4 to 8	More than 8		
Leads	Number of contacts	From 0 to 30	From 30 to 100	More than 100		
Audience growth	Number of customers who liked organization's website	From 0 to 20	From 21 to 50	More than 50		

Audience growth can also depend on the loyalty level of the target audience, if targeted users share their good experiences in their environment. Therefore, this factor is related to the success of communication and social media experts' ability to identify the target audience and its reach.

After the criteria for each factor and their normalized values were determined, experts evaluated the significance of each factor on a scale from [0, 1] (Table 2), and later the compatibility of expert opinions was calculated—Kendall's coefficient of concordance, and the consistency of expert opinions was indicated.

Table 2. A summary of the primary assessment factors that influence the effectiveness of an advertising campaign [0, 1] (created by the authors).

Factor	Expert Number									
	1	2	3	4	5	6	7	8	9	10
Sales	0.242	0.232	0.318	0.258	0.299	0.262	0.289	0.312	0.203	0.298
Content reach	0.179	0.189	0.152	0.108	0.183	0.169	0.128	0.159	0.16	0.169
Traffic to website	0.158	0.148	0.123	0.112	0.163	0.159	0.153	0.083	0.198	0.187
Impressions	0.148	0.138	0.118	0.218	0.108	0.149	0.173	0.128	0.196	0.102
Frequency	0.1	0.079	0.09	0.106	0.08	0.09	0.07	0.15	0.086	0.073
Relevance score	0.073	0.102	0.08	0.102	0.055	0.071	0.069	0.066	0.077	0.074
Leads	0.051	0.06	0.068	0.066	0.07	0.052	0.06	0.052	0.05	0.054
Audience growth	0.049	0.052	0.051	0.03	0.042	0.048	0.058	0.05	0.03	0.043
Total	1	1	1	1	1	1	1	1	1	1

The results of expert assessment have shown that the most significant factors are sales (0.27), content reach (0.16), traffic to website (0.15) and impressions (0.15), while less significant factors are leads (0.06) and audience growth (0.04) (Figure 3).

After identifying the significance of primary assessment factors that influence advertising campaigns on social media networks and establishing their normalized values, the assessment continued by estimating an integrated criterion which shows the effectiveness of an advertising campaign on a scale [1, 3]. The closer the estimate was to the score of 3, the more effective the implemented campaign would be.

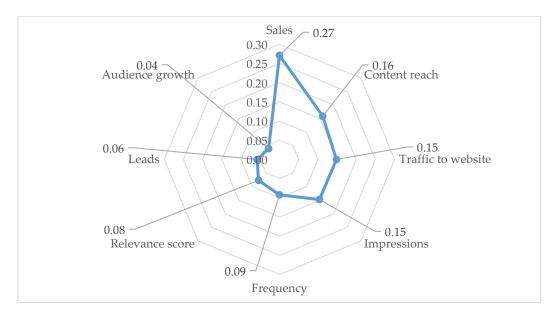


Figure 3. The significance of primary assessment factors that influence advertising campaigns on social media networks on a scale [0, 1] (created by the authors).

The integrated criterion of the effectiveness of advertising campaigns on social media networks R is equal to the sum of the values of the primary assessment criteria that influence advertising campaign, multiplied by the significances [73,74]:

$$R = \sum_{i=1}^{n} \omega_i \cdot R_i \tag{1}$$

where ω_i —the significance of the primary assessment criteria; and R_i —the normalized values of the primary assessment criteria.

When the integrated criterion is calculated, the next stage is the decision-making set, which takes into account the maximum gap between the maximum possible values of factor assessment criteria and the values of the assessment criteria for the evaluated factors [76,77]:

$$A_i = \left(N_i \cdot \omega_{ij}^k\right) - \left(N_i^* \cdot \omega_{ij}^k\right) \tag{2}$$

where A_i —the maximum gap between the possible values of the maximum and the assessed criteria N_i —the normalized value of the ith criterion, N_i^* —the maximum possible normalized value of the ith criterion, ω_{ij}^k —the significance of the ith assessment criterion. The estimated gap is treated as the areas that should be addressed and to eliminate these issues a subset of solutions is formed.

The suggested structure of evaluating the factors that influence the effectiveness of advertising campaigns on social media networks is characterized by a complex assessment, creating the preconditions to determine the strengths and weaknesses of the factors that influence the advertising campaign and, on that basis, creating further solutions for the improvement of the advertising campaign.

5. Discussion and Conclusions

An advertising campaign on social media networks is defined as means of communication with a target customer of a certain duration used by an organization that aims to inform, motivate, persuade or influence the target audience to achieve the communication objectives of a certain organization and using appropriate social networks and their platforms for that.

Advertising campaigns on social media networks not only enable organizations to understand and meet the changing informational needs of the customer, ensure targeted communication with

customers and receive feedback, but the same organizations also encounter particular complexity assessment challenges when analysing advertising campaigns due to the diversity of approaches and factors.

Advertising campaigns on social media networks, as a part of communication with target customers, create preconditions for expeditious and relatively small investments to strengthen the relationships between the organization and its customers. On social networks, users are given the opportunity to form communities, exchange information, express opinions and discuss topics, and become active content creators. However, to ensure proper communication, an adequate assessment of the effectiveness of advertising campaigns is essential.

During the first stage of the international expert assessment, experts from 39 assessment factors identified in the scientific literature selected eight essential assessment factors for evaluating the effectiveness of advertising campaigns on social media networks: sales, content reach, traffic to website, impressions, frequency, relevance score, leads and audience growth.

In the second stage, experts determined the significances of essential factors that influence advertising campaigns on social media networks and their assessment criteria on a scale [0, 1] and normalized values on a scale [1, 3]. The results of the study have shown that the main influence on advertising campaigns are sales, content reach, traffic to website and impressions, while less important factors are leads and audience growth.

The proposed structure of advertising campaigns on social media network assessment creates preconditions to conduct a more objective study, identify the factors that influence advertising campaigns, carry out a versatile assessment, identify strengths and weaknesses and, on this basis, formulate solutions related to the improvement of advertising campaigns on social media networks.

The results obtained during the study have some limitations. The proposed structure of the assessment of advertising campaigns on social media networks is tailored to those advertising campaigns on social media networks that focus on promoting sales. Also, the identified assessment factors and criteria bring about preconditions to evaluate the products (services) that are already in the market. Therefore, the proposed assessment structure is not suitable for evaluating the development of the products (services) that only attempt to enter the market. Another limitation is that, to carry out the assessment of advertising campaigns on social media networks, the organization has to own an online shop to which a potential customer comes from social networks.

Further scientific research could be developed in the following areas: achieving the objectivity and complexity of the assessment of advertising campaigns on social media networks; conducting research by integrating the customer's approach to the effectiveness of campaigns; carrying out an experiment to examine the assessment factors of the effectiveness of advertising campaigns on social media networks and their applicability to various types of organizations, taking into account the specifics of the activities these organizations operate; and evaluating the interconnectivity of the assessment variables of advertising campaigns and their impact on the performance of an organization. We see the cybersecurity issues of social networks as emerging area of further research [78–81].

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References

- 1. Digital Information World. Global Social Media Statistics for 2017. Available online: https://www.digitalinformationworld.com/2017/02/global-social-media-statistics.html (accessed on 3 January 2018).
- 2. Md Dawot, N.I.; Ibrahim, R. A Review of features and functional building blocks of social media. In Proceedings of the 8th Malaysian Software Engineering Conference (MySEC), Langkawi, Malaysia, 23–24 September 2014; pp. 177–182.

3. Kilgour, M.; Sasser, S.L.; Larke, R. The social media transformation process: Curating content into strategy. *Corp. Commun. Int. J.* **2015**, *20*, 326–343. [CrossRef]

- 4. Kim, B.; Min, J. The distinct roles of dedication-based and constraint-based mechanisms in social networking sites. *Internet Res.* **2015**, 25, 30–51. [CrossRef]
- 5. Krishen, A.S.; Berezan, O.; Agarwal, S.; Kachroo, P. The generation of virtual needs: Recipes for satisfaction in social media networking. *J. Bus. Res.* **2016**, *69*, 5248–5254. [CrossRef]
- 6. Liu, J.H.; Shi, W.; Elrahman, O.; Ban, X.; Reilly, J.M. Understanding social media program usage in public transit agencies. *Int. J. Transp. Sci. Technol.* **2016**, *5*, 83–92. [CrossRef]
- 7. Wang, C.; Guan, X.; Qin, T.; Yang, T. Modeling heterogeneous and correlated human dynamics of online activities with double pareto distributions. *Inf. Sci.* (*Ny*) **2016**, 330, 186–198. [CrossRef]
- 8. Ashley, C.; Tuten, T. Creative strategies in social media marketing: An exploratory study of branded social content and consumer engagement. *Psychol. Mark.* **2015**, *32*, 15–27. [CrossRef]
- 9. Felix, R.; Rauschnabel, P.A.; Hinsch, C. Elements of strategic social media marketing: A holistic framework. *J. Bus. Res.* **2017**, *70*, 118–126. [CrossRef]
- 10. Mislove, A.; Marcon, M.; Gummadi, K.P.; Druschel, P.; Bhattacharjee, B. Measurement and Analysis of Online Social Networks. In Proceedings of the IMC'07—7th ACM SIGCOMM Conference on Internet Measurement, San Diego, CA, USA, 24–26 October 2007.
- 11. Singer, A. 16 Rules for Social Media Optimization Revisited. Available online: http://www.toprankblog.com/2009/08/social-media-optimization-redux (accessed on 30 January 2017).
- 12. Vivo, J.M.N. Social networks as journalistic paradigm. Spanish media on Facebook. *Rev. Lat. Comun. Soc.* **2010**, *65*, 176–186.
- 13. Couldry, N. Media, Society, World: Social Theory and Digital Media Practice; Polity Press: Cambridge, UK, 2012.
- 14. Kietzmann, J.H.; Silvestre, B.S.; Mccarthy, I.P.; Pitt, L. Unpacking the social media phenomenon: Towards a research agenda. *J. Public Aff.* **2012**, *12*, 120–126. [CrossRef]
- 15. Treem, J.W.; Leonardi, P.M. Social media use in organizations: Exploring the affordances of visibility, editability, persistence, and association. *Commun. Yearb.* **2012**, *36*, 143–189. [CrossRef]
- 16. Bamman, D.; Eisenstein, J.; Schnoebelen, T. Gender identity and lexical variation in social media. *J. Socioling*. **2014**, *18*, 135–160. [CrossRef]
- 17. Bonini, T. Twitter as a public service medium? A content analysis of the Twitter use made by radio RAI and RNE. *Commun. Soc.* **2014**, 27, 125–146.
- 18. Wen-Bin, C.; Szu-Wei, C.; Da-Chi, L. Does Facebook promote self-interest? Enactment of indiscriminate one-to-many communication on online social networking sites decreases prosocial behavior. *Cyberpsychol. Behav. Soc. Netw.* **2014**, *17*, 68–73.
- 19. Ellison, N.B.; Vitak, J.; Gray, R.; Lampe, C. Cultivating social resources on social network sites: Facebook relationship maintenance behaviors and their role in social capital processes. *J. Comput. Commun.* **2014**, *19*, 855–870. [CrossRef]
- 20. Kwahk, K.-Y.; Park, D.-H. The effects of network sharing on knowledge-sharing activities and job performance in enterprise social media environments. *Comput. Hum. Behav.* **2016**, *55*, 826–839. [CrossRef]
- 21. Ahmedi, L.; Rrmoku, K.; Sylejmani, K.; Shabani, D. A Bimodal social network analysis to recommend points of interest to tourists. *Soc. Netw. Anal. Min.* **2017**, *7*, 1–22. [CrossRef]
- 22. Barreto, J.E.; Whitehair, C.L. Social media and web presence for patients and professionals: Evolving trends and implications for practice. *PM&R* **2017**, *9*, S98–S105.
- 23. Brown, B.P.; Mohan, M.; Boyd, D.E. Top Management attention to trade shows and firm performance: A relationship marketing perspective. *J. Bus. Res.* **2017**, *81*, 40–50. [CrossRef]
- 24. Devineni, P.; Koutra, D.; Faloutsos, M.; Faloutsos, C. Facebook wall posts: A model of user behaviors. *Soc. Netw. Anal. Min.* **2017**, *7*, 1–15. [CrossRef]
- 25. Garcia, D.; Mavrodiev, P.; Casati, D.; Schweitzer, F. Understanding popularity, reputation, and social influence in the Twitter society. *Policy Internet* **2017**, *9*, 343–364. [CrossRef]
- 26. Li, M.; Wang, X.; Gao, K.; Zhang, S. A survey on information diffusion in online social networks: Models and methods. *Information* **2017**, *8*, 1–21.
- 27. Liu, J.H.; Ban, X.; Elrahman, O.A. *Measuring the Impacts of Social Media on Advancing Public Transit*; Portland State University: Portland, OR, USA, 2017.

28. Penni, J. The future of online social networks (OSN): A measurement analysis using social media tools and application. *Telemat. Inform.* **2017**, *34*, 498–517. [CrossRef]

- 29. De Meo, P.; Messina, F.; Rosaci, D.; Sarné, G.M.L. Forming time-stable homogeneous groups into online social networks. *Inf. Sci. (Ny)* **2017**, *414*, 117–132. [CrossRef]
- 30. Scuotto, V.; Del Giudice, M.; Peruta, M.R.; Tarba, S. The performance implications of leveraging internal innovation through social media networks: An empirical verification of the smart fashion industry. *Technol. Forecast. Soc. Chang.* **2017**, *120*, 184–194. [CrossRef]
- 31. Sheikhahmadi, A.; Nematbakhsh, M.A. Identification of multi-spreader users in social networks for viral marketing. *J. Inf. Sci.* **2017**, *43*, 412–423. [CrossRef]
- 32. Killian, G.; McManus, K. A marketing communications approach for the digital era: Managerial guidelines for social media integration. *Bus. Horiz.* **2015**, *58*, 539–549. [CrossRef]
- 33. Elliott, R.; Boshoff, C. The marketing of tourism services using the internet: A resource-based view. *S. Afr. J. Bus. Manag.* **2009**, *40*, 35–49.
- 34. Tiago, M.T.; Tiago, F. Revisiting the impact of integrated internet marketing on firms' online performance: European evidences. *Procedia Technol.* **2012**, *5*, 418–426. [CrossRef]
- 35. Du, S.; Tao, Y.; Martinez, A.M. Compound facial expressions of emotion. *Proc. Natl. Acad. Sci. USA* **2014**, 111, 1454–1462. [CrossRef] [PubMed]
- 36. Guo, C.; Saxton, G.D. Tweeting social change: How social media are changing nonprofit advocacy. *Nonprofit Volunt. Sect. Q.* **2014**, 43, 57–79. [CrossRef]
- 37. Sampson, R.; Barbour, R.; Wilson, P. Email communication at the medical primary-secondary care interface: A qualitative exploration. *Br. J. Gen. Pract.* **2016**, *66*, 467–473. [CrossRef] [PubMed]
- 38. Franke, G.R.; Taylor, C.R. Public perceptions of billboards: A meta-analysis. *J. Advert.* **2017**, 46, 395–410. [CrossRef]
- 39. Pensa, R.G.; Di Blasi, G. A Privacy self-assessment framework for online social networks. *Expert Syst. Appl.* **2017**, *86*, 18–31. [CrossRef]
- 40. Ryczko, K.; Domurad, A.; Buhagiar, N.; Tamblyn, I. Hashkat: Large-scale simulations of online social networks. *Soc. Netw. Anal. Min.* **2017**, *7*, 1–13. [CrossRef]
- 41. Zhan, Y.; Liu, R.; Li, Q.; Leischow, S.J.; Zeng, D.D. Identifying topics for e-cigarette user-generated contents: A case study from multiple social media platforms. *J. Med. Internet Res.* **2017**, *19*, 14. [CrossRef] [PubMed]
- 42. Lee, Y.-J.; Yoon, H.J.; O'Donnell, N.H. The effects of information cues on perceived legitimacy of companies that promote corporate social responsibility initiatives on social networking sites. *J. Bus. Res.* **2018**, *83*, 202–214. [CrossRef]
- 43. Okazaki, S.; Taylor, C.R. Social media and international advertising: Theoretical challenges and future directions. *Int. Mark. Rev.* **2013**, *30*, 56–71. [CrossRef]
- 44. Bart, Y.; Stephen, A.T.; Sarvary, M. Which products are best suited to mobile advertising? A field study of mobile display advertising effects on consumer attitudes and intentions. *J. Mark. Res.* **2014**, *51*, 270–285. [CrossRef]
- 45. Shen, G.C.-C.; Chiou, J.-S.; Hsiao, C.-H.; Wang, C.-H.; Li, H.-N. Effective marketing communication via social networking site: The moderating role of the social tie. *J. Bus. Res.* **2016**, *69*, 2265–2270. [CrossRef]
- 46. Vismara, S. Equity Retention and social network theory in equity crowdfunding. *Small Bus. Econ.* **2016**, *46*, 579–590. [CrossRef]
- 47. Karnowski, V.; Kümpel, A.S.; Leonhard, L.; Leiner, D.J. From incidental news exposure to news engagement. How perceptions of the news post and news usage patterns influence engagement with news articles encountered on Facebook. *Comput. Hum. Behav.* **2017**, *76*, 42–50. [CrossRef]
- 48. Reijmersdal, E.A.; Boerman, S.C.; Buijzen, M.; Rozendaal, E. This is advertising! Effects of disclosing television brand placement on adolescents. *J. Youth Adolesc.* **2017**, *46*, 328–342. [CrossRef] [PubMed]
- 49. Sobh, R.; Soltan, K. Endorser ethnicity impact on advertising effectiveness: Effects of the majority vs. minority status of the target audience. *J. Mark. Commun.* **2016**, 1–14. [CrossRef]
- 50. Sterne, J. Social Media Metrics: How to Measure and Optimize Your Marketing Investment; John Wiley: Hoboken, NJ, USA, 2010.
- 51. Rautio, A. Social Media ROI as Part of Marketing Strategy Work—Observations of Digital Agency Viewpoints. Master's Thesis, Aalto University, Espoo, Finland, 2012.

52. Jayaram, D.; Manrai, A.K.; Manrai, L.A. Effective use of marketing technology in eastern europe: Web analytics, social media, customer analytics, digital campaigns and mobile applications. *J. Econ. Financ. Adm. Sci.* 2015, 20, 118–132. [CrossRef]

- 53. Albarran, A.B. Management of Electronic and Digital Media, 6th ed.; Cengage Learning: Boston, FL, USA, 2017.
- 54. Gupta, S.; Hanssens, D.; Hardie, B.; Kahn, W.; Kumar, V.; Lin, N.; Sriram, N.R.S. Modeling customer lifetime value. *J. Serv. Res.* **2006**, *9*, 139–155. [CrossRef]
- 55. Richardson, M.; Dominowska, E.; Ragno, R. Predicting clicks: Estimating the click-through rate for new ads. In Proceedings of the International World Wide Web Conference, Banff, AB, Canada, 8–12 May 2007; pp. 521–529.
- 56. Chaffey, D.; Ellis-Chadvick, F.; Mayer, R.; Jonston, K. *Internet Marketing: Strategy, Implementation and Practice*, 4th ed.; Pearson Education Limited: London, UK, 2009.
- 57. Junco, R. The relationship between frequency of Facebook use, participation in Facebook activities, and student engagement. *Comput. Educ.* **2012**, *58*, 162–171. [CrossRef]
- 58. Shuai, X.; Pepe, A.; Bollen, J. How the scientific community reacts to newly submitted preprints: Article downloads, twitter mentions, and citations. *PLoS ONE* **2012**, 7. [CrossRef] [PubMed]
- 59. Podobnik, V. An analysis of Facebook social media marketing key performance indicators: The case of premier league brands. In Proceedings of the 12th International Conference on Telecommunications—ConTEL 2013, Zagreb, Croatia, 26–28 June 2013; pp. 131–138.
- 60. Escobar-Rodríguez, T.; Carvajal-Trujillo, E.; Monge-Lozano, P. Factors that influence the perceived advantages and relevance of Facebook as a learning tool: An extension of the UTAUT. *Australas. J. Educ. Technol.* **2014**, *30*, 136–151. [CrossRef]
- 61. Hall, J.A.; Pennington, N.; Lueders, A. Impression management and formation on Facebook: A lens model approach. *New Media Soc.* **2014**, *16*, 958–982. [CrossRef]
- 62. Muench, F.; Hayes, M.; Kuerbis, A.; Shao, S. The independent relationship between trouble controlling Facebook use, time spent on the site and distress. *J. Behav. Addict.* **2015**, *4*, 163–169. [CrossRef] [PubMed]
- 63. Kwok, L.; Yu, B. Taxonomy of Facebook messages in business-to-consumer communications: What really works? *Tour. Hosp. Res.* **2016**, *16*, 311–328. [CrossRef]
- 64. Uslay, C.; Karniouchina, E.; Altintig, A.; Reeves, M. Do businesses get stuck in the middle? The peril of intermediate market share. *SSRN Electron. J.* **2017**. [CrossRef]
- 65. Wang, C.; Zhang, P. The evolution of social commerce: The People, management, technology, and information dimensions. *Commun. Assoc. Inf. Syst.* **2012**, *31*, 105–127.
- 66. Laranjo, L.; Arguel, A.; Neves, A.L.; Gallagher, A.M.; Kaplan, R.; Mortimer, N.; Mendes, G.A.; Lau, A.Y.S. The influence of social networking sites on health behavior change: A systematic review and meta-analysis. J. Am. Med. Inform. Assoc. 2015, 22, 243–256. [CrossRef] [PubMed]
- 67. Hsieh, M.-Y.; Jane, C.-J. Social media: Explore the most influenced determinants of the social media to enhance customer's satisfaction in current hyper-competitive m-commerce. In *Applied System Innovation: Proceedings of the 2015 International Conference on Applied System Innovation, ICASI 2015, Osaka, Japan, 22–27 May 2015;* IEEE: New York, NY, USA, 2016; pp. 1021–1024.
- 68. Huang, S.-F.; Su, C.-J.; Saballos, M.B.V. Social media big data analysis for global sourcing realization. In *Advances in Computer and Computational Sciences*. *Advances in Intelligent Systems and Computing*; Bhatia, S., Mishra, K., Tiwari, S., Singh, V., Eds.; Springer: Singapore, 2018; pp. 251–256.
- 69. Zavadskas, E.K. *Complex Estimation and Choice of Resource Saving Decisions in Construction*; Mokslas: Vilnius, Lithuania, 1987.
- 70. Zavadskas, E.K.; Kaklauskas, A. *Pastatų Sistemos Techninis Įvertinimas [Building Systems Technical Assessment;* Technika: Vilnius, Lithuania, 1996.
- 71. Zavadskas, E.K.; Turskis, Z.; Tamošaitiené, J. Multicriteria selection of project managers by applying grey criteria. *Technol. Econ. Dev. Econ.* **2008**, *14*, 462–477. [CrossRef]
- 72. Zavadskas, E.K.; Mardani, A.; Turskis, Z.; Jusoh, A.; Nor, K.M. Development of TOPSIS method to solve complicated decision-making problems—An overview on developments from 2000 to 2015. *Int. J. Inf. Technol. Decis. Mak.* 2016, 15, 645–682. [CrossRef]
- 73. Ginevičius, R.; Podvezko, V. Hierarchiškai struktūrizuotų rodiklių reikšmingumo kompleksinis įvertinimas. *Bus. Theory Pract.* **2003**, *4*, 111–116.

74. Ginevičius, R.; Podvezko, V. Sudėtingų reiškinių ir dydžių hierarchinis struktūrizavimas dalinių rodiklių nuoseklaus lyginimo būdu. *Bus. Theory Pract.* **2003**, *4*, 147–154.

- 75. Darbari, J.D.; Kannan, D.; Agarwal, V.; Jha, P.C. Fuzzy criteria programming approach for optimising the TBL performance of closed loop supply chain network design problem. *Ann. Oper. Res.* **2017**, 1–46. [CrossRef]
- 76. Raudeliūnienė, J.; Meidutė, I.; Martinaitis, G. Evaluation system for factors affecting creativity in the Lithuanian Armed Forces. *J. Bus. Econ. Manag.* **2012**, *13*, 148–166. [CrossRef]
- 77. Raudeliūnienė, J.; Meidutė-Kavaliauskienė, I.; Vileikis, K. Evaluation of factors determining the efficiency of knowledge sharing process in the Lithuanian National Defence System. *J. Knowl. Econ.* **2016**, *7*, 842–857. [CrossRef]
- 78. Štitilis, D.; Pakutinskas, P.; Malinauskaitė, I. Preconditions of sustainable ecosystem: Cyber security policy and strategies. *Entrep. Sustain. Issues* **2016**, *4*, 174–182. [CrossRef]
- 79. Limba, T.; Agafonov, K.; Paukštė, L.; Damkus, M.; Plėta, T. Peculiarities of cyber security management in the process of Internet voting implementation. *Entrep. Sustain. Issues* **2017**, *5*, 368–402. [CrossRef]
- 80. Šišulák, S. Userfocus—Tool for criminality control of social networks at both the local and international level. *Entrep. Sustain. Issues* **2017**, *5*, 297–314. [CrossRef]
- 81. Limba, T.; Šidlauskas, A. Secure personal data administration in the social networks: The case of voluntary sharing of personal data on the Facebook. *Entrep. Sustain. Issues* **2018**, *5*, 528–541.



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