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PRINCIPLES OF EFFECTIVE PLANNING OF ADVERTISING ACTIVITY IN THE 21ST CENTURY

The research contains a description of 12 principles of media planning, which will help to solve the tasks of media mix selection and strategic work with different media tools. The research goal is to determine the key principles of effective planning of advertising activity, which will be actual for media planning in the 21st century. Among the main principles are reach maximization, multi-media mix, digital plus TV, the display gives frequency, mobile thinking, regional specifics, etc.

Keywords: media; advertising; planning; marketing; principles.

The current dynamics and competitiveness of the market mean that marketing must constantly adapt its strategies to the challenges of a permanent change in order to fulfill its obligations to the consumer. As a result, enterprises strive for a

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dynamic balance, working with the variables of the marketing mix, in accordance with the innovative challenges posed by the market and the consumer [1].

Any advertising campaign will be successful in the case of the correct combination of a relevant advertising message (high-quality creative) and the correct choice of communication channels and tools for conveying this message to the target audience. The enterprise must always clearly form the purpose of each advertising campaign, which may consist in forming knowledge about the brand or enterprise, creating a positive image of the company, conveying information about the product and its competitive advantages in the market, etc., in order to later occupy a strong position in the market and ensure the company's sales growth.

At the same time, there are a number of problems that need to be solved, including the determination of the optimal media mix and the necessary size of the company's advertising budget, as well as the optimization of media planning processes. Economic-mathematical modeling with the help of Data Science technologies makes it possible to largely solve these problems and formulate recommendations for optimizing the media planning process and forming an effective media strategy [2], however, it is possible to single out general planning principles recommended for use among Ukrainian and foreign enterprises.

The generalization of advertising planning principles is very important as helps marketing practitioners and strategic managers to improve advertising planning by focusing on relevant recommendations and marketing achievements. Such principles make it possible to solve a set of strategic tasks in advertising planning such as the selection of media mix, development of effective campaign architecture, mix by formats and creatives, etc.

The specificity of the current level of development of the market environment, consumer behavior, and their interaction with various communication channels, as well as the impact of advertising activity on business results, requires adaptation of the principles of media planning to current needs.

So, **the purpose of this article** is to determine the key principles of effective planning of advertising activity, which will be actual for media planning in the 21st century. The proposed principles make it possible to increase the validity of marketing decisions and improve business and advertising results, so they are recommended for future implementation in marketing processes.

Advertising is almost always seen as a tactical decision, but this approach leads to a systematic misallocation of advertising and other resources between products. P. Doyle [3] shows why advertising must be developed on the basis of a clear strategy in today's multi-product firm and examines some of the unresolved dilemmas in advertising planning. C. Beltran-Royo et al. [4] propose and analyze an effective model of multi-stage multi-product advertising budgeting, which optimizes advertising investment for multiple products, taking into account cross-elasticity, various sales drivers, and the entire planning horizon. The authors proposed a simple procedure for calculating the optimal advertising budget and its optimal allocation, which can significantly increase the revenue from advertising.

How to distribute advertising tools in conditions of a limited budget is one of the leading problems in advertising planning [5]. To solve the problems of determining ad rates in real-time bidding, C. Zhang et al. [6] propose a multi-level budget constraint deep Q network framework that divides a long sequence in an RTB into several shorter ones with different budget levels and learns the optimal strategy for each level. The results show such an approach can achieve higher revenues and promote the marketing effect of advertising investments. S. Karray et al. [7] examine the scenarios of how advertisers optimally allocate advertising resources through cooperative advertising programs and their own. Retail advertising stimulates immediate sales but may harm long-term (post-advertising) demand, while own manufacturer's advertising aims to build brand equity and also stimulates both immediate and long-term sales.

The paper by N. Gavrylenko and M. Shkoda [8] is about media planning and its role in the company's advertising campaign. The main stages of drawing up the ad campaign media plan and the system of indicators necessary for making a sound management decision have been studied. The article [9] discusses the main principles of managing advertising activities at the enterprise and the role and place of advertising in its business strategy. Considering the need to achieve the best efficiency, the expediency of using a system approach in the management of advertising activities is substantiated. V. Lisovska and A. Moshenska [10] reflect the relevance of the problem of modeling the process of advertising appeals of the enterprise and analyzed the analytical functions of the sales reaction in the form of a logistic curve, which simulates the response from marketing costs, which turn affects the volume of sales, as well as economic and mathematical modeling of the distribution of advertising appeals with a rational distribution of budget for each channel with profit maximization using the gradient descent method.

Before starting media planning, as part of the media strategy, decisions are made about the necessary audience coverage and the frequency of advertising contacts. The Ostrow matrix involves the analysis of certain market factors, factors of the quality of an advertising message, and media factors, which allows it to be used as a method for determining the effective frequency of an advertising message. The purpose of the article [11] is to highlight a practical method for determining the effective frequency of an advertising message — Ostrow's matrix, which allows you to analyze many factors that affect the effectiveness of advertising returns, to digitize all factors, and as a result — to determine the minimum threshold of effective frequency for advertising messages.

Promotion is an important stage of the life cycle of any product. All companies dealing in one or more goods advertise their products. Advertising is the most common form of promotion for most products. The study [12] focuses on companies that produce a variety of products and advertise them using available mass media, with budget as the main restriction. P. Jha et al.

formulate the problem of media planning to allocate the available budget in several media considered suitable for advertising some products, taking into account the aspect of marketing segmentation of advertising in order to maximize the total reach in all segments.

Nowadays, the use of advertising is one of the main types of marketing activity. Optimizing this component of the business process can significantly improve the performance of enterprises, to ensure appropriate planning of advertising costs. In order to optimize advertising costs, media agencies use different types of software that are based on statistical data (market volume, demand, competition, etc.) to calculate the advertising budget [13].

A. Belenky and I. Belenkii [14] consider the generalization of the mathematical model and operations research problems formulated on its basis as part of the approach to planning an advertising campaign for goods and services. B. Pérez-Gladish et al. [15] propose a crisp logarithmic programming model on fuzzy information that will help companies plan their TV advertising campaigns. The goals include achieving the highest impact on the audience or the maximum reduction of advertising costs. The impact of advertising during an ad campaign is measured by the logarithm of ad repetitions.

Online banner ads, which are the most common form of internet advertising, attract the attention of consumers. It is important for online advertisers to plan their ads to maximize their effectiveness. G. Kim and I. Moon present an online banner ad scheduling model with a new objective function that includes four factors that influence ad performance [16].

Digital technology has enabled «invisible» advertising, such as native advertising, that looks like entertainment content. Scientific research largely supports causal relationships between advertising exposure and certain behaviors, including requests, purchases, and consumption of advertised products [17].

Programmatic advertising is an emerging and rapidly growing information technology phenomenon that also responds to and influences consumers and their behavior. Despite its popularity and widespread use, research in this area remains scarce. Research by A. Samuel et al. [18] contributes to the understanding of this technology by revealing the means by which it functions and interacts with consumers. Programmatic advertising is common in online advertising. However, it offers managers limited control over the type of website where the ads appear, leading to brand safety problems. The study [19] analyzes the impact of brand website quality on branding and performance campaigns and enriches the understanding of programmatic advertising implications.

Despite the significant number of scientific research, issues related to forming general principles of advertising planning remain unclear. The need to develop the principles of effective media planning of advertising activity is caused by the demand to simplify the process of developing a media strategy and its implementation in the future. This forms the relevance and purpose of the current research.

ADVERTISING PLANNING PRINCIPLES

Twelve main principles of media planning of the 21st century are formed in Fig. 1. Let's consider the specifics of each of them in more detail.

Principle 1: Reach/Coverage maximization is the main target. The speed of reaching the audience is a primary task in media planning, but it is important to correctly define and control the target indicators. In this case, it is always most appropriate to measure the weekly coverage at the frequency of contact of the target audience with the advertising message 1 time or more (frequency 1+), the potential of which differs significantly by media channel (Fig. 2). The frequency 1+ is recommended for measurement as it shows the general potential of each media channel and the capacity of covered consumers.

Each communication channel has a different potential for building reach. Thus, television (TV) quickly and reliably builds high weekly coverage on all frequencies, in particular on 1+, 3+, and 5+. TV is the leader in building coverage, as it allows you to reach ~70% coverage of the target audience during the week¹. The online activity (in Digital) allows you to quickly rebuild weekly coverage, however, due to limited inventory, it has a much lower upper limit — ~30—40%, depending on the target audience². As for outdoor advertising (OOH — out of home), due to regional restrictions, the coverage potential within national campaigns is not so high, but coverage within the city can reach 80%³, but it grows slowly and with a high frequency of contact with the regional target audience.

Principle 2: Multimedia mix increases efficiency. Each communication channel is strong at different times of the day and has a different degree of conveying the message to the target audience. So, for example, the main time for viewing TV content is the evening hours after 6:00 p.m., and in the daytime hours the audience is in most cases outside the home ⁴, which increases the role of mobile formats of placement in digital, the volume of audience contacts with outdoor advertising increases, as well as advertising in public transport (Fig. 3). As a result, the OMNI-channel mix always has higher efficiency as each media covers different touchpoints of contacts with the target audience. Additionally, the use of different media in a media mix makes it possible to achieve synergy because one media channel increases the quality of contacts with another communication channel due to the new contact on the consumer journey.

Principle 3: Online + TV are strong supplements. Digital and TV as communication channels perfectly complement each other, taking into account the fact that the audience of TV viewers and online audiences are significantly different, which affects the potential and specificity of target audience coverage.

¹ *Nielsen Ukraine*. URL: https://www.nielsen.com/about-us/locations/ukraine/ (accessed on: 20.12.2022).

² Kantar Ukraine. URL: https://www.kantar.com/locations/ukraine#_= (accessed on: 20.12.2022).

³ Ibid.

⁴ Ibid.

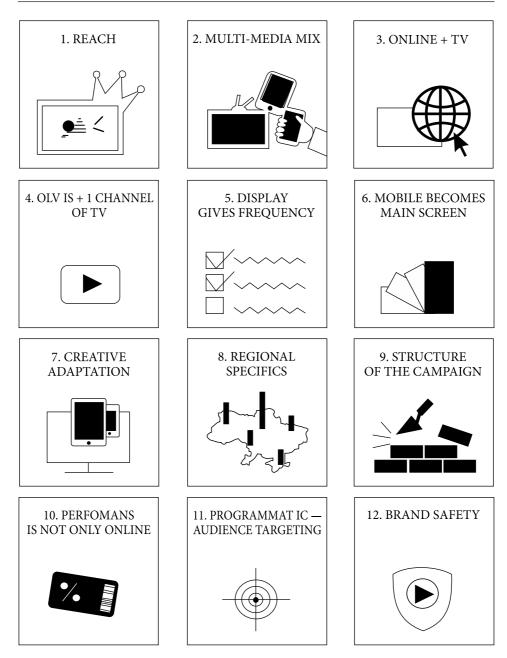


Fig. 1. Basic principles of media planning of the 21^{st} century *Source*. Constructed by authors.

TV is usually watched more by the older generation. Thus, for the audience older than 45 years, TV allows to ensure coverage at the level of 80%, but for the audience under 30 years, this indicator does not reach 70% (Fig. 4). Younger audiences use the Internet more, and in addition, each of these two communication channels reaches a certain unique segment of the audience that only watches TV or only uses the Internet. Yes, only TV is watched by 12% and up

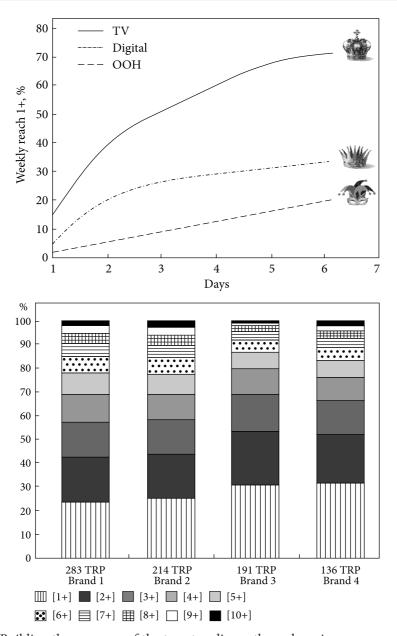


Fig. 2. Building the coverage of the target audience through various communication channels, as well as the distribution of coverage by frequencies on TV *Source.* Constructed by authors based on internal data of the marketing researchers Nielsen Ukraine and Kantar Ukraine (data is confidential) for 2021.

to 68% of the audience, depending on the age group among people aged 16 to 65, and only 4% to 32% of the audience use only the Internet ^{5, 6}.

⁵ *Nielsen Ukraine*. URL: https://www.nielsen.com/about-us/locations/ukraine/ (accessed on: 20.12.2022).

⁶ *Kantar Ukraine*. URL: https://www.kantar.com/locations/ukraine#_= (accessed on: 20.12.2022).

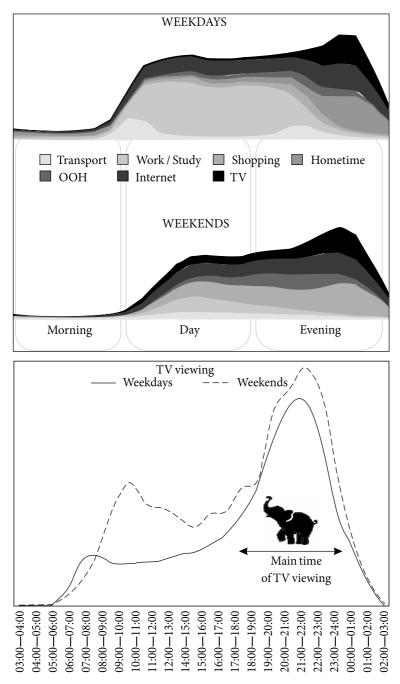


Fig. **3.** Weekday and weekend media consumption for a specific target audience *Source*. Constructed by authors based on internal data of the marketing researchers Nielsen Ukraine and Kantar Ukraine (data is confidential) for 2021.

Accordingly, in order to maximize the coverage of the target audience and increase their contacts with the advertising message, it is advisable to connect TV + Digital activity. It is due to the use of two communication channels at once that the optimization of target audience coverage occurs

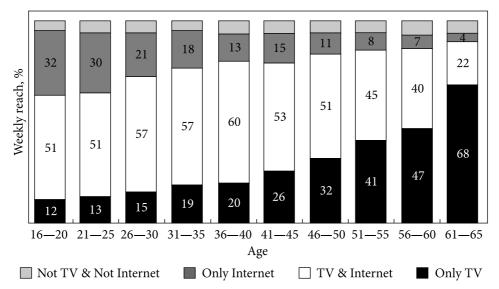


Fig. 4. Weekly coverage of the audience on TV and on the Internet for different age groups

Source. Constructed by authors based on internal data of the marketing researchers Nielsen Ukraine and Kantar Ukraine (data is confidential) for 2021.

since in this case, online activity generates additional coverage to coverage of television advertising.

In addition, the digital activity allows you to renew the audience and increase profits because, for brands that currently use only television activity, digital turns into a zone that allows you to reach a significant part of potential buyers. Incremental weekly coverage (coverage of the new audience, which uses Digital and doesn't use the TV) can reach an average 18% of consumers (from 4% to 32% depending on the target audience) (Fig. 4).

Principle 4: Online video (OLV) is another TV channel for consuming video content. Online video is a full-fledged replacement for TV, and the target audience very often does not distinguish where they saw this or that material — on TV or on the Internet. In this regard, placement on the Internet using the video format is an effective addition to television activity.

Additionally, the specificity of placement in Digital provides, in contrast to TV, the opportunity to limit frequency tails and thus control the frequency of contact of the target audience with the advertising message (Fig. 5).

Depending on business and communication tasks, there are several options for using online video in the media mix:

- consistent use for the continuation of the advertising campaign and the transition to the strategy of permanent (continuity) presence;
- parallel use to increase media pressure and increase the share of voice (SOV), stand out from the noise in a high-profile category, and launch a new product or a new brand communication platform.

⁷ Ibid.

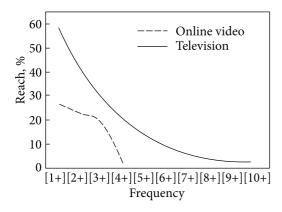


Fig. **5.** Reaching the target audience on different frequencies *Source*. Constructed by authors based on internal

data of the marketing researcher Nielsen Ukraine (data is confidential) for 2021.

However, it is important to understand that depending on the target audience, the overlap between online and offline is usually quite significant and, as a result, OLV adds only a few percent of additional reach and it is important to optimize the media mix taking into account the cost of the reach and the overall media budget. There is always a limit value of the share of the media budget directed to the placement of online video, after reaching which the cost for the increase in coverage increases sig-

nificantly and the further increase of the budget is already ineffective. Such a limit value will depend on the specific target audience, the level of the budget, as well as the specifics of the category. Using the example of one of the products, exceeding the share of digital activity in the format of the online video above 10% leads to an increase in cost more than twice (Fig. 6).

Principle 5: Display provides an additional frequency of contact with the target audience, just like outdoor advertising. If video formats (TV and OLV) build the coverage of the target audience, but usually on the eve of purchases and in the evening, then display formats on the Internet work to remind a potentially interested audience about the product during the day and on the way to work or home. In addition, the consumption of display formats is relatively uniform throughout the day. Taking into account the above, such a media mix works for the direct generation of purchases at points of sales.

Principle 6: Mobile thinking should lead to a significant share of mobile placement in the media mix. Mobile is becoming the main screen for the majority of the audience, which requires concentration and adaptation of advertising activity to this variant of consumption of advertising messages. 78% of the online audience are smartphone users 8, who no longer distinguish where they saw this or that information. The boundaries between the online and offline worlds are blurring and there is a need to allocate a bigger part of the advertising budget to mobile tools in digital.

Principle 7: Adaptation of creatives. It is critical for brands to use adapted formats of all advertising materials, and to adapt all applications and sites for mobile consumers in order to form a quality perception of the brand by its target audience. The target audience interacts with each communica-

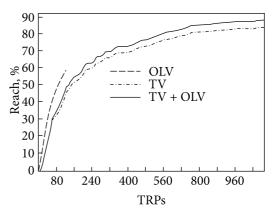
⁸ Ibid.

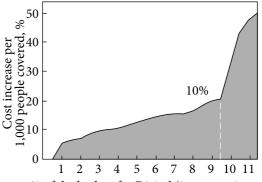
Fig. 6. Building cumulative coverage TV + OLV, as well as determining the optimal share of the budget for video placement

Source. Constructed by authors based on internal data of the marketing researchers Nielsen Ukraine and Kantar Ukraine (data is confidential) for 2021.

tion channel differently and this affects our behavior. It is important to make the advertising materials look as native as possible in the eyes and surroundings of the target audience, and the perception of advertising is as clear as possible without requiring additional explanations.

In the framework of creative work, the question of what length of videos is the most optimal, taking into account their cost and effectiveness, always arises. Data





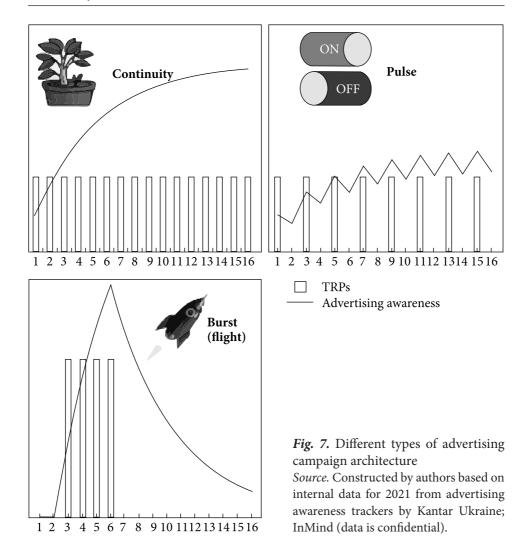
% of the budget for Digital (in comparison with the budget for TV campaign), %

Science and modeling of business indicators allow you to evaluate the actual effectiveness of each creative material and the effect of different lengths of videos in order to form the optimal tactics of media placement [2].

Principle 8: Regional specificity. Ukrainians are very different in terms of their consumer attitudes, behavior, and consumer preferences. The experience of Ukrainian companies proves that a national advertising campaign has different returns in different regions and there is an urgent need for the formation of a regional media strategy. In-depth data analysis allows you to identify regions whose residents respond less well to a comprehensive TV, digital, or outdoor advertising campaign and regions in which advertising generates more sales than the national average in order to redistribute regional activity and thus optimize marketing investments.

Principle 9: Campaign Building Architecture. Depending on the goals and specifics of the product and category, there are various options for building the architecture of media campaigns, which determines the choice of the best option in each case (Fig. 7):

- Burst strategy (flight strategy) has the following characteristics: rapid audience coverage; high weights; short campaign period;
- Continuity strategy constant activity with low weights, which has the following characteristics: stretching coverage in the period; low weights (usually half as much from burst); long campaign period;



• Pulse strategy — week-by-week activity, which has the following characteristics: stretching of coverage in the period; low weights (usually half as much from burst); alternating one week on the air and one week off.

After choosing the campaign architecture, the question arises as to how to use the media mix of TV and online tools. Two options are possible:

• Parallel placement, which works well for increasing frequency and persuasiveness, but shortens the period of presence on the air. The main advantage of this type of placement is incremental weekly coverage, but on the other hand, the weekly frequency increases, the period of presence shortens, and there is also a high cross-section of the audience — about 82% of the Internet campaign will be covered on television ^{9; 10}. This type is suitable for a

⁹ *Nielsen Ukraine*. URL: https://www.nielsen.com/about-us/locations/ukraine/ (accessed on: 20.12.2022).

¹⁰ Kantar Ukraine. URL: https://www.kantar.com/locations/ukraine#_= (accessed on: 20.12.2022).

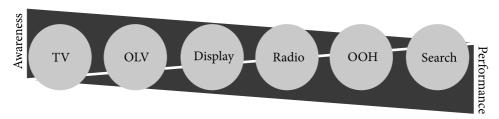


Fig. **8.** The main tools of media promotion and the tasks that they perform *Source.* Constructed by authors based on econometric modeling of internal data of the advertisers (confidential).

complex category or seasonal products when placement intensity and SOV should be increased, as well as when launching a new creative or a new product to build a sufficient level of awareness among the target audience;

• Consistent placement that does not increase weekly frequency, but increases air presence.

Among the main advantages of this type of advertising placement are an increase in the accumulated weekly reach and an increase in the duration of the campaign. The main disadvantage is the lack of incremental coverage and lower SOV. This type of activity is recommended for support campaigns and a gradual transition to a continuity strategy.

Principle 10: Performance is not only online. Performance should be considered any activity aimed directly at the growth of traffic and sales. A vivid example is the marketing strategy of pharmacies, which distribute the media budget evenly between the Internet, outdoor advertising, and radio, which work not to build awareness but to directly attract an interested target audience to sales points (Fig. 8).

Summarizing the results of the econometric modeling for different market categories that we conducted earlier [20; 21], there are conclusions, that TV and OLV are the best brand awareness builders, display and radio work both on awareness and on performance goals, as well as OOH and search campaigns in the Internet have a high efficiency on performance metrics (Fig. 8). As a main metrics for econometrics modeling were selected brand awareness, sales, and share of market collected for pharmaceutical, FMCG, banking, retail categories.

Principle 11: Programmatic as the audience targeting should be maximized. Programmatic is a collection of models and technologies aimed at finding target audiences and placing ads with a high degree of targeting to the most interesting segments. The best solution is to increase programmatic placement with the highly segmented target audience as it helps to increase the results of the advertising campaign.

Programmatic purchases allow you to optimize the cost of reaching the target audiences, control the frequency of contact with the target audiences, increase the response of potential customers (for example, the CTR indicator), and also ensure the growth of the key brand and business KPIs (for example, awareness of the brand/advertising message, the level of consumption, sales, etc.).

Principle 12: Brand Safety — protection of the brand environment needs to be in permanent focus. With automatic purchases, you can rely on technology, but additional control and verification will only increase the quality of placement. It is always necessary to control the context in which advertising materials are placed, as an unpleasant or inappropriate context will have a significant negative impact on the health of the brand. In order to avoid this, it is worth:

- work with proven partners;
- exclude inappropriate topics and use negative words (for example, war, alcohol, gambling, drugs, profanity, hatred and negative news, terror, etc.);
- exclude unreliable resources from the placement plan. In Ukraine, the «Clean Sky» initiative operates, since according to the Ukrainian Anti-Piracy Association ¹¹, more than 1.7 thousand domains are untrustworthy.

CONCLUSIONS

The main principles of ad planning were development and contain reach maximization, multi-media mix, which increases synergy effects, online plus TV as these communication channels perfectly complement each other, online video is another TV channel, the display provides the additional frequency of contact with potential consumers, mobile thinking, adaptation of creative materials, considering of regional specificity, optimization of campaign building architecture, performance is not only online, programmatic is audience targeting and brand safety is the protection of the brand environment.

The research results will be useful for marketing practitioners, strategic managers, and scientific society for the improvement of advertising planning and future development of marketing principles, considering all changes which will appear in the 21st century (such as war, pandemic, and other new ones). The proposed principles of media planning make it possible to increase the validity of marketing decisions and improve business and advertising results, so they are recommended for implementation in Ukrainian and international companies.

Summing up, it is worth noting that adherence to these principles greatly simplifies media planning and increases the effectiveness of an advertising campaign, but does not solve all problems with planning advertising activity, which is why there is a need for in-depth study of available data and economic and mathematical modeling using Data Science technologies, which are the areas of future researches.

¹¹ Ukrainian Anti-Piracy Association. URL: https://apo.kiev.ua/ (accessed on: 20.12.2022).

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ПРИНЦИПИ ЕФЕКТИВНОГО ПЛАНУВАННЯ РЕКЛАМНОЇ ДІЯЛЬНОСТІ У XXI ст.

Сучасні динаміка і конкурентоспроможність ринку створюють такі передумови, що маркетинг повинен адаптувати свої стратегії до викликів, постійних змін, щоб виконати свої зобов'язання перед споживачем. Будь-яка рекламна кампанія буде успішною лише в разі правильного поєднання релевантного рекламного повідомлення (якісного креативу) і вірного вибору каналів комунікації та інструментів донесення цього повідомлення до цільової аудиторії.

Описано 12 ключових принципів планування рекламної активності, які можуть бути використані в період підготовки медіа-стратегії і здатні допомогти вирішити завдання підбору медіа-міксу і стратегічної роботи з різними рекламними інструментами. Визначено ключові принципи ефективного планування рекламної діяльності, які будуть актуальними для медіа-планування XXI ст. Основні принципи рекламного планування включають: максимізацію охоплення, мультимедійний мікс, що збільшує синергетичний ефект, рекламну онлайн-активність, яка посилює телебачення, оскільки ці канали комунікації ідеально доповнюють один одного; онлайн-відео, яке ε ще одним телеканалом, а дисплей забезпечу ε додаткову частоту контактів з потенційними споживачами, мобільне мислення, адаптацію креативних пропозицій; урахування регіональної специфіки, оптимізацію архітектури побудови кампанії та перформанс не тільки в Інтернеті; программатік, який є основою для націлювання на аудиторію, а також безпеку бренду, яка передбачає захист його оточення. Результати дослідження будуть корисними маркетологам-практикам, стратегічним менеджерам і науковому товариству для вдосконалення планування рекламної активності й майбутнього розвитку принципів маркетингу, враховуючи всі зміни, які відбудуться у XXI ст. Запропоновані принципи медіа-планування спроможні посилити обґрунтованість маркетингових рішень і покращити бізнес- і рекламні результати, тому рекомендовані для впровадження в українських і міжнародних компаніях.

Ключові слова: медіа; реклама; планування; маркетинг; принципи.