

FEATURES OF EARLY DIAGNOSTICS OF MULTIMEDIA CAMPAIGN EFFECTIVENESS IN GOOGLE ADS

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Abstract. *The work examines the specifics and key stages of developing multimedia advertising campaigns, as well as modern approaches to their evaluation. A set of key performance indicators (KPIs) for assessing multimedia campaigns at different stages is defined, along with the specifics of using automated bidding strategies for launching such campaigns.*

In the experimental part, a methodology for early diagnostics of the effectiveness of multimedia campaigns for a construction materials store using Google Ads tools is developed. This methodology allows the detection of early signs of low performance and supports decision-making on optimizing creatives, audience targeting, and communication channels.

To implement the methodology, a psychographic analysis of the target audience was carried out and advertising materials were developed.

Keywords: *multimedia advertising campaign, construction materials, google ADS, early diagnostics, effectiveness, metrics, segmentation, banner.*

Introduction

The modern digital advertising market is characterized by intense competition, high campaign costs, and substantial uncertainty of results. Advertisers often learn about ineffectiveness only after weeks or months, once the budget has already been spent, which leads to wasted expenditure. To detect campaign problems at the very start of a launch – for example, during the first week – it is necessary to develop a methodology for early diagnostics that will allow optimal corrective actions to be applied to the campaign. These may include adjustments to banners, the landing page, the target audience, or communication channels, which contributes to significant cost reduction and higher ROI. An effective tool here is not only monitoring key campaign indicators but also the use of automated Google Ads strategies.

This approach makes it possible to identify key problems at the very initial stages, particularly during the first seven days of operation, and to quickly introduce the necessary changes. Adjustments may concern creatives, landing pages, targeting settings, or the selection of advertising placements, which helps reduce unnecessary expenses and increase ROI.

Continuous monitoring of key metrics and the application of automated Google Ads strategies – which optimize impressions, bids, and reach algorithmically – plays an important role in this process [14, 15].

For the construction materials segment, where the customer journey to purchase is longer and users repeatedly return to product search, automated strategies are of particular value. They ensure a smooth development of the decision-making funnel, allow for more accurate targeting of the audience, and enable a more rational allocation of the advertising budget.

Automated Google Ads strategies are a key tool for campaign optimization in the display network, since they allow Google's algorithms to independently determine optimal bids, ad formats, and audience segments [16]. This is especially important for products with a long decision-making cycle, including construction materials, where users go through several stages of engagement – from initial interest to a final inquiry or purchase.

The development of an effective methodology for early diagnostics of a multimedia advertising campaign is possible only with the use of modern tools – for example, offline conversions, modern mathematical models for predicting user behavior, and automated Google Ads strategies.

This determined the relevance of the presented research. The research was conducted using the real projects of Artakov M., a certified specialist in search and shopping advertising in Google Ads.

An important methodological aspect of the research is the design of diagnostic interfaces – software solutions that transform the behavioral signals of a campaign into a basis for corrective decision-making already at the early stages of its operation. This area constitutes the field of professional activity of the founding designer of Lumos AI (Hrozian Ya., San Francisco, California, USA), a company that develops platforms for evaluating the effectiveness of artificial intelligence systems in the medico-biological field and healthcare. Within this practice, experience has been accumulated in designing interfaces for detecting leading indicators of declining AI-model performance under conditions of limited and noisy data. Methodologically, this approach is related to the task of early diagnostics of multimedia campaigns: in both cases, the designer's task is to transform fragmentary performance indicators into a clear and actionable decision-making tool. This interdisciplinary experience was taken into account when formulating the requirements for the methodology's prototype testing tools (see section 5).

Purpose and objectives of the study

The purpose of the work is to develop a methodology for early diagnostics of the effectiveness of multimedia campaigns for a construction materials store within the Google Ads system. This methodology should make it possible, at the initial stages of a campaign, to detect signs of low performance and to make decisions on optimizing advertising materials, audiences, and communication channels for the construction materials store.

The object of the study is the process of evaluating the effectiveness of advertising campaigns in the Google Ads environment.

To achieve the stated purpose, the following objectives were addressed:

- analysis of modern approaches to evaluating the effectiveness of advertising campaigns in Google Ads;
- identification of a set of key indicators that may signal the effectiveness or ineffectiveness of a multimedia campaign at its early stages;
- development of criteria for «warning signals» in the dynamics of advertising metrics;
- development of an early-diagnostics methodology that combines analytical indicators and visual elements;
- implementation of prototype tools for testing the methodology;
- development of multimedia banners taking into account the psychological characteristics of consumers;
- modeling of the financial funnel;
- approbation of the developed methodology using real Google Ads campaigns as examples;
- development of recommendations for the client.

Main part

1 Analysis of the literature on the subject of the work

An analysis of the literature on the subject of the study confirmed its relevance. Practical marketing advice in many publications emphasizes that real-time campaign monitoring makes it possible to detect deviations and respond immediately, which leads to reduced wasteful budget spending. Article [1] shows that bounce rate metrics and Click-Through Rate (CTR) have a significant correlational impact on the Quality Score of Google advertising campaigns. A high bounce rate alone may already warn of a likely decline in ad quality. This review demonstrates that modern deep-learning-based models successfully predict CTR from early indicators of user interaction, which can be used as one element of early warning.

The research by the authors of [2] proposes the use of a Text Strength Indicator (TSI), which predicts CTR based on ad text and finds similar ads with high CTR for comparison. This provides an example of how weak ads can be identified «early» by their text and quickly corrected.

In paper [3], a simple linear regression is used to predict CTR based on the advertising context and impression characteristics. This shows that even basic statistical models can give early indications of a potentially weak campaign result.

The authors of article [4] propose an updated ranking model for the initial stages of an advertising campaign that takes into account several components (clicks, ad quality) and helps improve the quality of ad selection at the early stages of the campaign.

Analysis of the literature has shown that approaches to early diagnostics of advertising campaign effectiveness already exist in the literature, but they are often:

- oriented toward search ads more than toward multimedia or banner ads;
- subject to a «cold start,» that is, limited data at the beginning of campaigns;
- pay little attention to a comprehensive approach that would combine several indicators (CTR, bounces, time on site, scroll depth) and conditions of production/budget/format.

2 Features of developing multimedia advertising campaigns

Display advertising is an online promotion tool that uses various multimedia formats: banners, video, animation, interactive ads. Owing to its visual expressiveness and the diversity of formats, it easily attracts users' attention, stimulates their interaction, and helps form stable brand associations [5, 6].

Modern technologies make it possible to place display ads in the Google Display Network, on YouTube, in Google Maps, Gmail, on social networks, and in mobile applications. This ensures accurate reach to the target audience, taking into account their interests, behavior, and online activity.

Main formats of display advertising [7, 8]:

- banner advertising. One of the most flexible and effective formats. It combines vivid design, a short message, and a clear call to action. Regular testing of visuals and copy makes it possible to substantially increase click-through and overall campaign effectiveness;

- video advertising. It allows brand values to be conveyed through dynamic video content, makes it possible to tell brand stories, to show a product «in action,» and to evoke an emotional response. This is one of the most powerful tools for influencing recognition and building trust;

- native advertising. Organically integrates into content – articles, news feeds, social networks. It looks natural, does not irritate the user, and forms a positive attitude toward the brand;

- advertising on social networks. Flexible formats, accurate targeting, and a large number of visual solutions make it possible to effectively promote products and services on Facebook, Instagram, LinkedIn, TikTok and other social networks [9]. For an advertising campaign to be effective, it must be designed taking into account the specifics of each platform, in order to increase engagement, recognition, and conversions. This is especially effective for products with broad demand, promotions, and seasonal offers;

– contextual display advertising. This is a network of Google partner placements where banners and ads are shown to users based on their interests and behavior. Contextual display advertising suits various stages of the sales funnel and makes it possible to reach a large audience, as well as to bring visitors back through remarketing;

– in-app advertising. Ads are displayed inside mobile applications and games. The format is especially effective for engaging active users and promoting mobile products. Targeting can be configured by devices, interests, and behavior.

A multimedia campaign is a comprehensive marketing strategy that may include video, animation, interactive elements, and audio. Its goal is to increase brand recognition, grow sales, and build loyalty [10]. Creating an effective campaign is based on target-audience analytics, the development of a concept and creative idea, the creation of multimedia content (videos, banners, presentations), media planning, continuous monitoring, reporting, and optimization.

The general stages of creating a multimedia advertising campaign are as follows [10].

Stage 1 – Marketing analysis. Competitors, their communications, positioning, and promotion channels are studied. A product analysis is carried out, and unique advantages and potential points of growth are identified.

Stage 2 – Strategy development. Based on the data obtained, a strategy is formed with the definition of goals, KPIs, channels, budget, and communication format.

Stage 3 – Query analysis and ad creation. Keywords are selected and banners and video clips are created. Content is adapted to specific platforms and formats.

Stage 4 – Campaign launch. Geotargeting, display schedules, bids, and budgets are configured. Irrelevant placements are disabled.

Stage 5 – Management and optimization. The first indicators are analyzed, adjustments are made, and new creative variants are tested

Stage 6 – Reporting and analytics. After the campaign is completed, a detailed report with recommendations for further improvement is prepared.

The introduction of an early-diagnostics methodology is possible at stages 5 to 6 (campaign launch, indicator analysis, adjustments, and optimization of results).

Multimedia offers significant advantages in advertising:

- high engagement (dynamic content easily holds attention);
- emotional impact (video and audio amplify emotions and increase memorability);
- flexibility (content can be adapted to any platform);
- effectiveness (multimedia allows even complex information to be conveyed simply and clearly) [11].

All of this explains the active use of multimedia advertising campaigns by various brands and retail organizations.

Let us analyze examples of successful Ukrainian multimedia advertising campaigns.

Epicenter – «We Build Together» (a video campaign for TV and YouTube). A series of dynamic clips demonstrating construction processes and ready-made solutions for the home. Animation, close-ups of products, and an emotional narrative were used [12].

Nova Liniya – seasonal digital campaigns. Banners, video clips, and native integrations in thematic media are used. The campaigns are aimed at promoting offers, discounts, gardening products, and construction materials [13].

Leroy Merlin Ukraine – digital promotion of DIY solutions. They use interactive banners, video tutorials, and tips for home craftsmen. This motivates the audience not only to buy materials but also to carry out projects on their own [14].

Multimedia campaigns are also extremely effective for stores selling construction and renovation materials, for the following reasons.

Visualization of complex products. Construction materials are often difficult to «sell» through text alone. Video, 3D animation, and demonstrations make it possible to show the product's advantages, the way it is used, and the final result.

Building trust. Before/after formats, demonstrations of renovations, real cases – this is content that prompts the buyer to choose a particular store.

Engaging a professional audience. Builders, installers, and tradesmen respond better to video reviews, training clips, and tool tests.

Seasonality and promotions. Banners and video formats work excellently for quickly communicating promotional offers – insulation in winter, paint in spring, garden goods in summer, and so on.

Remarketing brings customers back. Users who viewed a product can easily be brought back through display banners – especially when the product is expensive and the buyer takes a long time to make a decision.

Multimedia advertising campaigns significantly increase the effectiveness of promoting construction materials stores. Through a combination of video, graphics, animation, and accurate targeting, they:

- increase brand recognition;
- better explain the advantages of products;
- build trust in the store;
- bring well-motivated buyers;
- increase conversion both in online and offline stores.

For the construction industry, multimedia strategies are not merely a trend but a necessity that makes it possible to stand out from competitors and to present products in the way modern buyers require.

However, to minimize risks and respond in a timely manner to ineffective campaign elements, early diagnostics of multimedia campaign effectiveness is necessary.

3 Capabilities of Google Ads for creating multimedia advertising campaigns

3.1 Analysis of the main capabilities of the Google Ads platform.

Google Ads is one of the most powerful platforms for promoting brands through multimedia content. It makes it possible to create visually rich campaigns that reach a wide audience, accurately target the right users, and deliver measurable results.

The Google Display Network includes more than 3 million sites, applications, and video platforms where multimedia ads can be shown. This provides enormous

audience reach, the display of ads in relevant content (renovation, interior design, construction, DIY, etc.), and a variety of formats: static banners, responsive ads, HTML5 animations, video formats, and so on.

Google Ads supports the following numerous content formats:

a) banners:

- 1) static (PNG, JPG);
- 2) animated (GIF, HTML5);
- 3) responsive (adapt to any size and format);

b) video advertising on YouTube:

- 1) In-stream (skippable and non-skippable);
- 2) Discovery video;
- 3) Bumper Ads (short 6-second clips);
- 4) Outstream video for mobile devices;

c) gallery ads (combinations of images, video, and text);

d) advanced interactive formats:

- 1) HTML5 ads;
- 2) animated banners;
- 3) interactive elements for user engagement.

Google Ads makes it possible to configure the target audience for a multimedia campaign as precisely as possible according to the following parameters:

- interest-based targeting (in-market shoppers, people planning a renovation, the purchase of tools, furniture, materials, and so on);
- demographics (age, gender, marital status, income level);
- content targeting (display in articles and videos on construction, renovation, design, gardening);
- remarketing (returning users who have visited the site or viewed specific products);
- Customer Match (uploading customer lists for precise personalized display).

Another significant advantage is automation and machine learning. Google Ads uses algorithms that optimize campaigns in real time. It can use:

- automated bidding strategies (Target CPA, Maximize Conversions, ROAS);
- automatic adaptation of creatives in responsive ads;
- selection of the most effective combinations of text, video, and banners;
- dynamic ads (pulling products from a feed).

This reduces manual work and increases effectiveness.

Google Ads also makes it possible to configure local advertising for stores. The available formats for promoting local points of sale – Local Campaigns automatically cover Maps, Search, and YouTube; settings for distance to the store; display of directions, operating hours, and promotions. All of this is especially useful for construction-materials stores.

Clear analytics and measurable KPIs in Google Ads make it possible to see the exact effect of multimedia advertising and to optimize it. The following tools for

measuring results are provided: banner interactions, video views, CTR, CPA, ROAS, sales attribution, conversions in Google Analytics 4, and others.

All of this makes Google Ads an ideal tool for multimedia campaigns and allows the creation of strong multimedia campaigns that operate at various stages of the funnel – from attracting attention to closing sales [15-17].

3.2 Key indicators for assessing the effectiveness of campaigns in Google Ads.

One of the main advantages of Google Ads campaigns is the large amount of data available for analysis. This is the key to a better understanding of the advertising campaign, the target audience, and customer interests for further optimization of advertising.

Because of the large volume of information, it is important to understand which indicators are best to use for analysis and how they help improve advertising campaigns.

Let us consider 8 key indicators of advertising campaigns in Google Ads [16, 18].

Impressions and clicks.

One of the main indicators of advertising effectiveness is impressions and clicks (Fig. 1). A click on an ad is the beginning of the sales process, and the number of clicks depends directly on how much money you spend. With the help of this metric, certain trends are tracked that may point to opportunities or to problems with the advertising. For example, if the number of clicks is growing, it is time to increase the budget or the bids on keywords. If the number of clicks is decreasing, this may indicate problems with the ad text or with the chosen keywords.

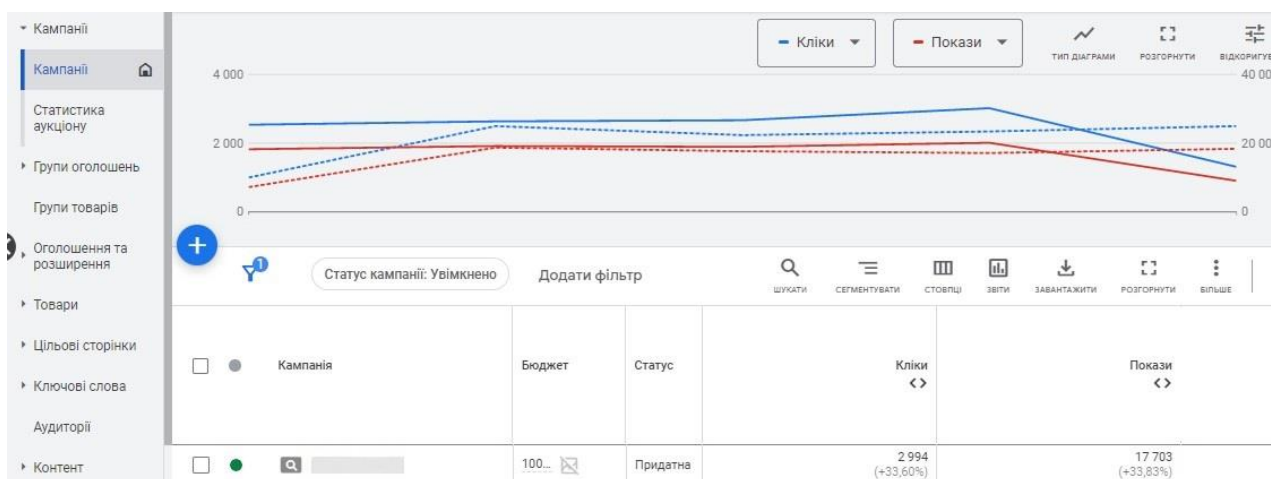


Figure 1 – Statistics of impressions and clicks

Cost per click (CPC). Like clicks, this indicator can convey very valuable information about trends. The cost per click is based on the competitiveness of the chosen keywords, according to the so-called query frequency. Therefore, if CPC rises, the keywords should be reviewed and an attempt should be made to use «longer-tail» words (more than 3 or 4 words long) to attract more targeted traffic. It is also possible to raise the maximum bids on important keywords in order to remain competitive at auctions (Fig. 2).

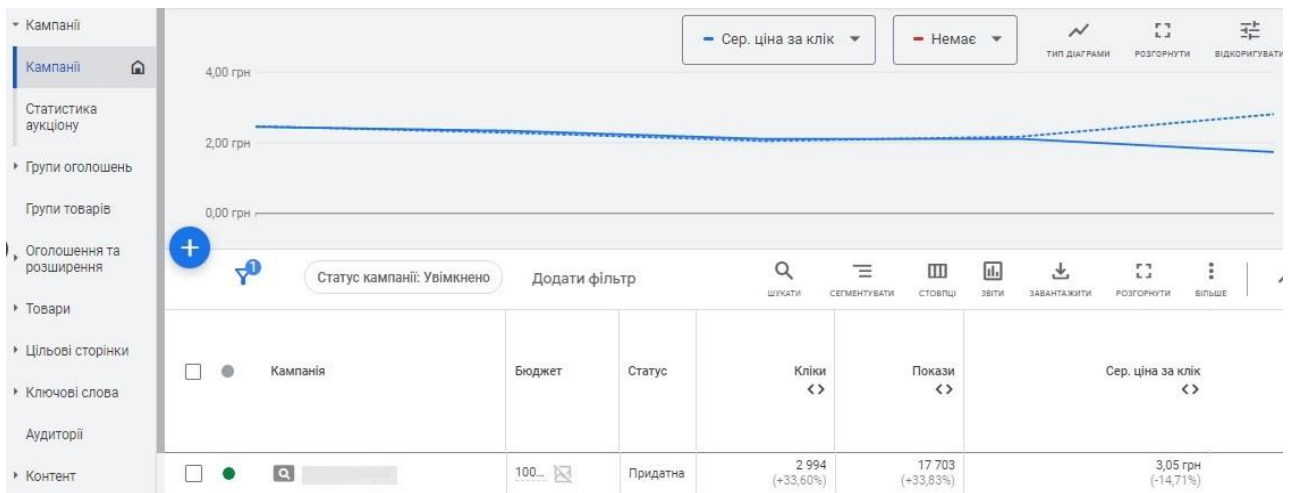


Figure 2 – CPC indicator

Ad click-through rate (CTR). This ratio of clicks to ad impressions helps in understanding one's customers by showing what works and what does not with the target audience. For example, a low CTR means that you are targeting the wrong audience or that you are not «speaking» their language in a way that convinces them to click on the ad. Therefore, the rhetoric should be replaced, the system should be allowed to process new ads, and after some time the indicator should be evaluated again (Fig. 3).

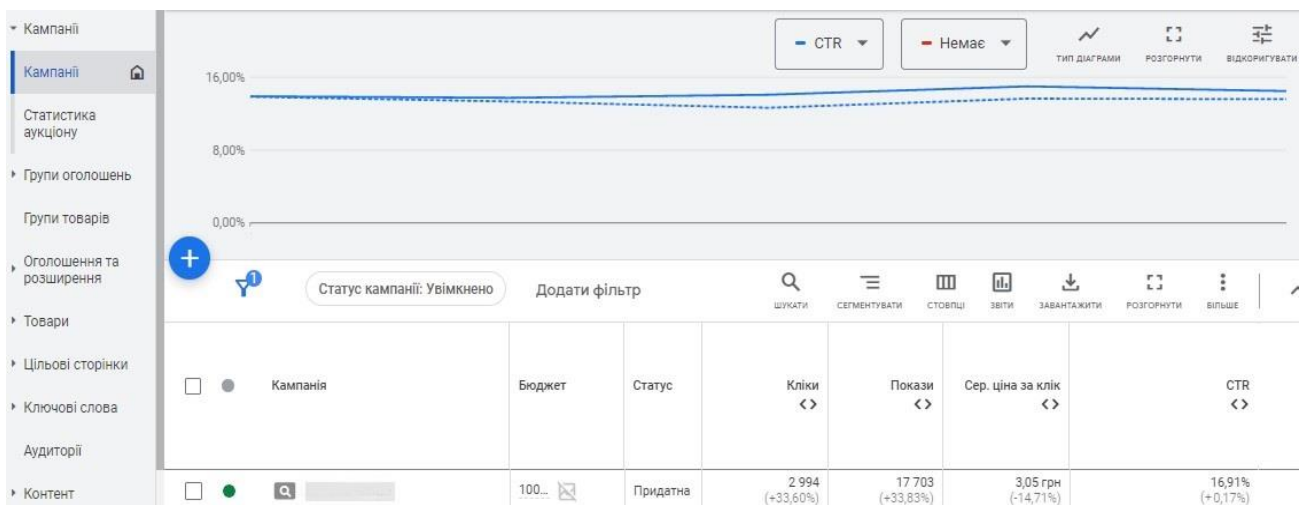


Figure 3 – CTR indicator

Impression share. This is the percentage of all potential ad impressions (Fig. 4). For example, if 1,000 search queries occurred for a keyword and the company's ads were shown 700 times, then the impression share is 70%.

Google also offers two categories of lost impression share: those lost due to limited budget and those lost due to ad rank. This information makes it possible to understand whether to increase the budget, raise bids, or improve quality indicators in the competition for higher ad positions.

Quality Score is an assessment of the relevance of ads, keywords, and landing pages for the user viewing the ad. It is quite important, since Google takes it into account along with the bid for the keyword when determining the position of the ad at

the auction. A higher Quality Score usually helps win against competitors' ads even with a higher bid than yours. In this way, Google ensures that ad positions are not reserved for those who pay the most; instead, everything is determined by creating the best experience for the user.

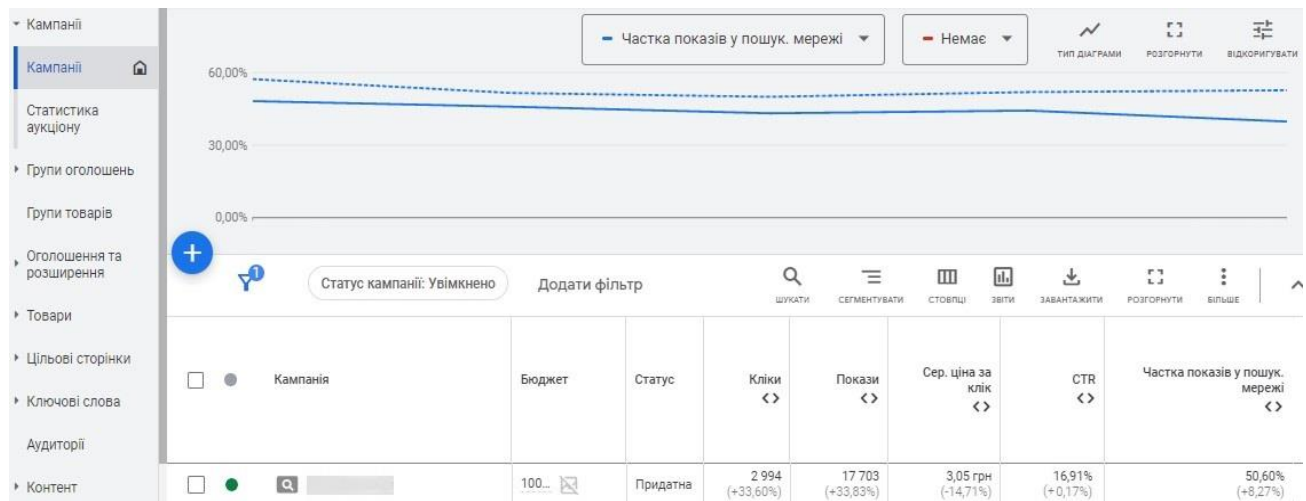


Figure 4 – Impression share

To increase Quality Score it is necessary to create well-structured ad groups; to have landing pages with extensive use of keywords related to everything being advertised; to use keywords in every ad; to show a call to action (CTA); and to make the value proposition very clear (Fig. 5).

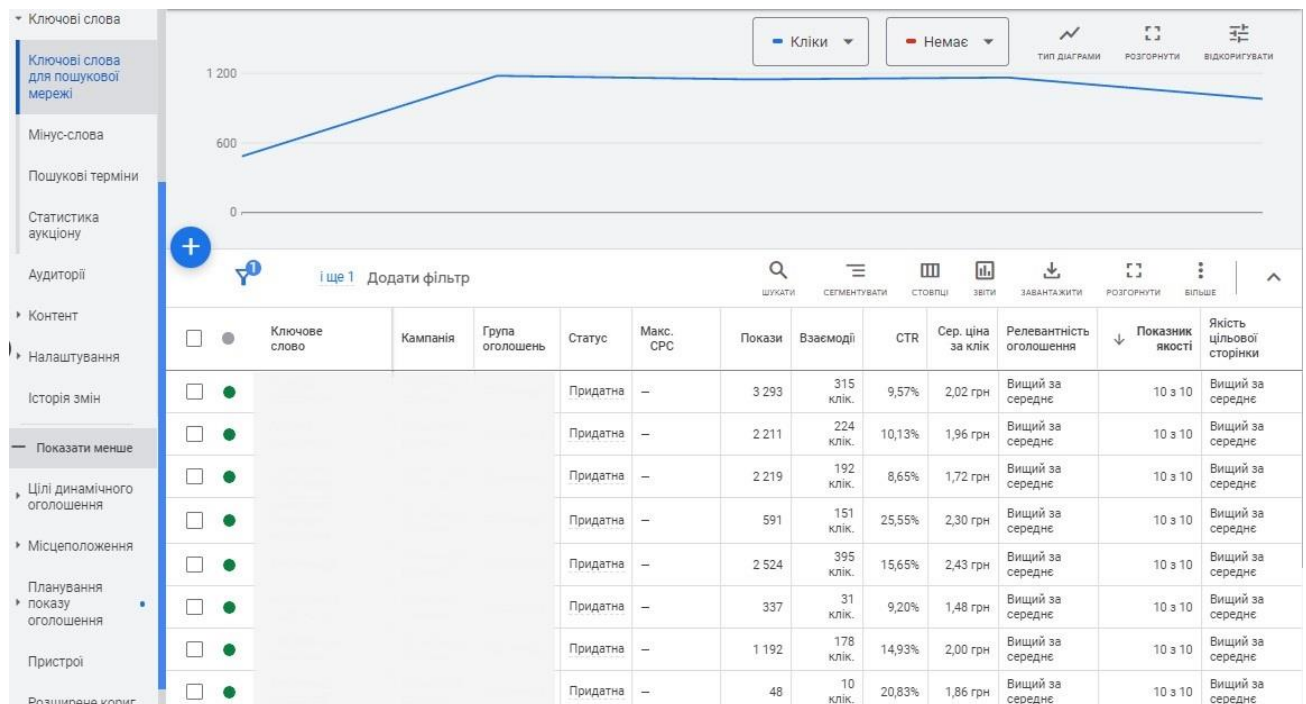


Figure 5 – Quality Score

Conversions.

Keywords and ads are the foundation of ad setup. And the foundation of effective advertising is conversions (Fig. 6). A conversion is a desired target action by the user on the site (for example, a product purchase, downloading documentation, or signing

up for a lesson). As the cost per click grows, sooner or later a situation arises in which it is simply financially impossible to pay for clicks on all keywords. A choice has to be made about which to keep working with and which not. Without conversion tracking it is impossible to know what brings in revenue and what exactly needs to be adjusted.

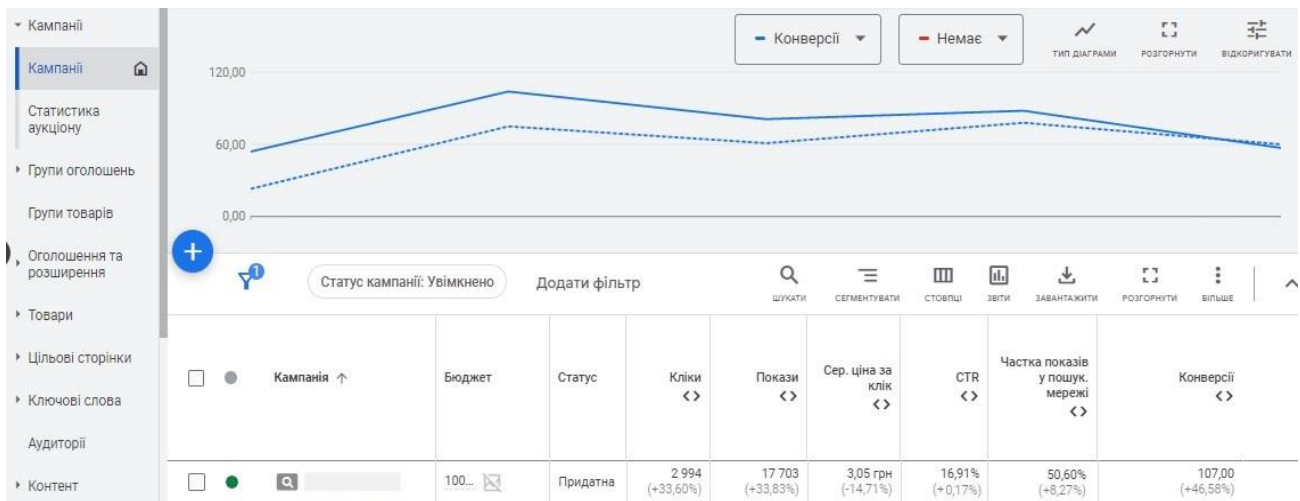


Figure 6 – Conversions

The conversion rate shows the ratio of the average number of conversions to clicks on ads as a percentage (Fig. 7). This indicator makes it possible to learn about the return on investment. The higher it is, the more profitable the campaign will be. If the conversion rate is low, aspects of the website should be analyzed, including design, navigation, relevance, the checkout process, and so on.

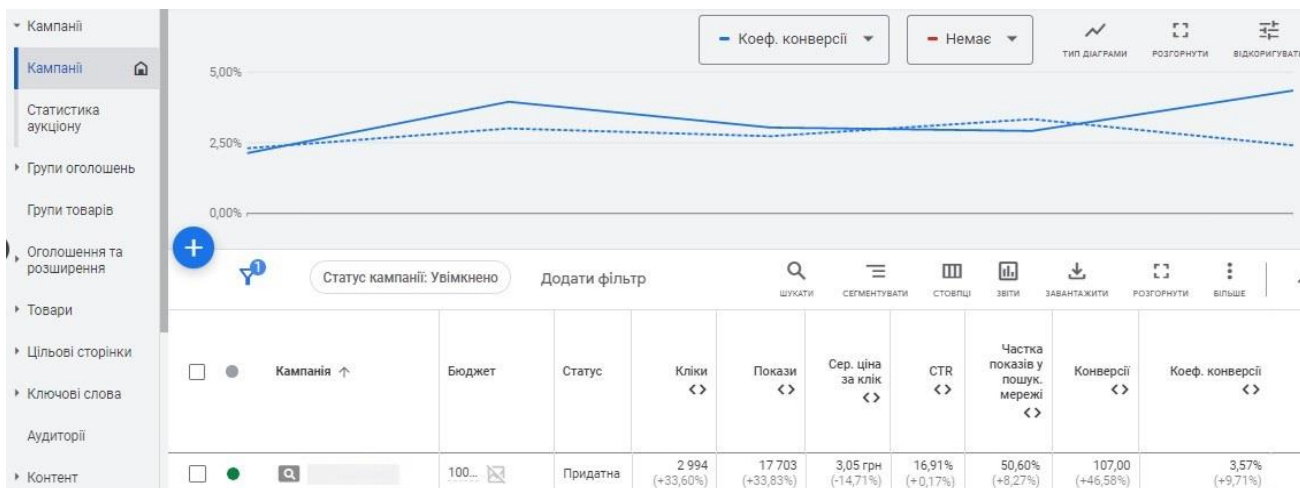


Figure 7 – Conversion rate

When tracking a decline in the conversion rate, it is necessary to:

- check that the tracking code is working;
- make sure that all target URLs are working;
- review search queries to make sure that all ads are shown for relevant queries;
- make sure that the ads and the information on the landing pages are not outdated;
- make sure that keywords and ads are active;
- check that there are no conflicts between negative keywords and keywords;
- make sure that the conversion rate is optimized regularly.

Cost per conversion.

In addition to understanding the number of conversions, another indicator that is worth tracking regularly is the cost per conversion, which is essentially the cost of advertising divided by the number of conversions it has generated. This indicator can quickly show which campaigns are working and which are not – in other words, which of them are spending too much without providing adequate return.

To determine an optimal cost per conversion, it is necessary to decide how much the company is ready to spend on a single sale of a product or service. In addition to the need to take into account the profit margin, it is very important to track the lifetime value of the customer (LTV). For example, is there a likelihood that the customer will have to buy your products again every few months? Is your customer base growing? If so, a high cost per conversion may be justified.

When the cost per conversion is high, it is also worth reviewing the various levels of an ineffective campaign and changing elements accordingly: for example, keywords that did not result in conversions, ad text, calls to action, and landing pages associated with the campaign (Fig. 8).

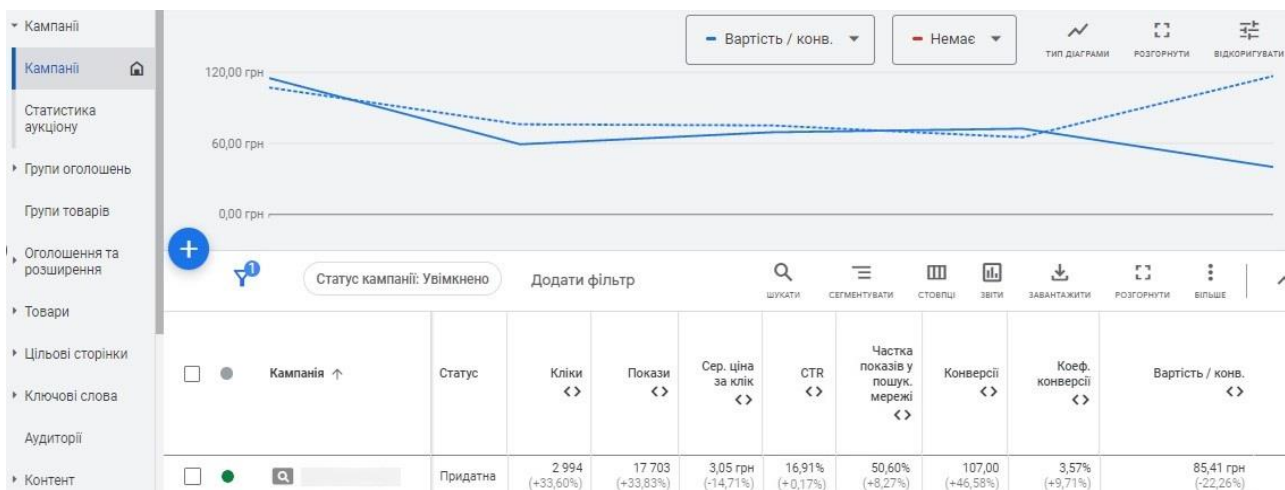


Figure 8 – Cost per conversion

3.3 Automated strategies for launching multimedia campaigns.

Automated Google Ads strategies for launching multimedia advertising campaigns are intelligent Google algorithms that independently manage bids, impressions, and ad optimization in order to achieve the best result in accordance with the chosen goal (for example, obtaining clicks, impressions, conversions, or increasing return on advertising investment) [17, 19].

These strategies are based on machine learning (AI). The system analyzes user behavior, context, conversion history, and thousands of signals (time of day, device, location, audience, etc.) in order to show ads to the most interested users.

Instead of the advertiser manually setting bids, Google itself determines whom and when to show the ad to; automatically adjusts bids in real time; and redistributes the budget between ads, groups, and placements (YouTube, Gmail, partner sites, applications).

The main types of automated Google Ads strategies for multimedia campaigns (banners, video, YouTube, Gmail, Discovery) are presented in Table 1.

Table 1 – Automated Google Ads strategies for multimedia campaigns

No.	Strategy name	Main goal	How the strategy works	Recommended use	Example of practical application
1	Maximize Clicks	Attracting traffic	Google automatically raises or lowers bids in order to obtain the largest number of clicks within the budget.	When it is necessary to quickly gather an audience or to test banners, landing pages, audiences.	A new brand launches an advertising campaign in order to attract traffic to the site and collect the first data.
2	Maximize Conversions	Obtaining more leads / purchases	The algorithm analyzes user behavior and shows ads to those who are more likely to perform the target action.	Campaigns with conversion tracking configured.	An online store shows banners with products in order to obtain purchases or leads.
3	Target CPA	Controlling the cost of a lead	Google sets bids so that the average cost per conversion does not exceed the set value.	When it is necessary to maintain a stable cost per lead (for example, for B2B or services).	An advertising agency configures a campaign to obtain leads at no more than UAH 200.
4	Target ROAS	Maximizing profit	The strategy optimizes bids in order to obtain the highest profit from each purchase, taking into account the income from conversions.	E-commerce where the price of products is known and the value of each conversion can be tracked.	An online store wants its advertising to bring in at least a 400% return on investment.
5	Target Impression Share	Increasing brand awareness	Optimizes bids so that ads are shown as often as possible in the top positions or on the first page.	Campaigns for branding or for launching a new product.	A company launches a video advertisement for a new cosmetics brand and wants to «show up» in front of the target audience.

Table 1 Continued

No.	Strategy name	Main goal	How the strategy works	Recommended use	Example of practical application
6	Smart Display Campaign	Automation of the entire process	Google itself creates and tests combinations of headlines, texts, images, selects the audience, and optimizes bids.	For the quick launch of campaigns without deep manual optimization.	The advertiser uploads banners and texts, and the system itself selects the most effective display options.
7	Maximize Conversion Value	Obtaining the maximum value (revenue)	Similar to Target ROAS, but without a fixed return – it focuses on maximizing the total value of all conversions.	Online stores or services with conversions of varying value.	The advertiser wants not just leads, but leads with the highest potential value.
8	Video Action Campaigns	Driving actions from video (click, lead, purchase)	Uses Smart Bidding to maximize conversions directly from YouTube videos.	For YouTube advertising aimed at sales or lead generation.	A product video is shown to users who are most likely to go to the site and make a purchase.

Advantages of automated strategies:

- reduction of the human factor (no need to change bids manually);
- faster campaign optimization;
- real-time market adaptation;
- better budget distribution;
- the possibility of launching campaigns even without deep knowledge of PPC.

Disadvantages:

- less control over the process (Google itself decides what and where to show);
- the need for a sufficient volume of data (without a history of conversions, the system learns slowly);
- may not be suitable for niche or narrowly specialized businesses.

4 Experimental studies

4.1 Stages of creating a multimedia advertising campaign for a construction-materials store.

In order to develop an effective methodology for early diagnostics of multimedia campaigns in Google Ads, let us consider in detail the stages of creating a multimedia advertising campaign. At the preliminary stage, the main tasks, the goals of each stage,

the performers, the sets of tools, the key results, and the typical KPIs for each stage are formed.

Key development stages.

1. Analysis and strategy:

- analysis of the niche, competitors, and target audience;
- definition of advertising goals (sales, leads, traffic, awareness);
- formation of a unique selling proposition (USP);
- identification of the key advantages of the product or service;
- selection of the type of campaigns (Search, Display, Performance Max, YouTube).

2. Selection and preparation of advertising materials:

- creation of advertising copy (headlines, descriptions, CTA);
- preparation of banners for display advertising;
- preparation of video for YouTube Ads (as needed);
- adaptation of creatives to various formats and sizes;
- alignment of the style of messages with the brand.

3. Setting up campaigns in Google Ads:

- selection of keywords and negative keywords;
- configuration of geotargeting and languages;
- determination of the budget and bidding strategy;
- configuration of audiences (interests, remarketing, similar audiences);
- connecting conversions (via GA4, GTM, or manually).

4. Launch and optimization:

- launch of the advertising campaigns;
- analysis of indicators (CTR, CPC, conversions, CPA, ROAS);
- A/B testing of ads and creatives;
- optimization of keywords, bids, and audiences;
- disabling ineffective ads and scaling successful ones.

5. Analytics and reporting:

- regular analysis of campaign results;
- evaluation of the achievement of the stated goals;
- preparation of reports for the client;
- implementation of strategic changes to increase effectiveness.

The foundation of an effective advertising campaign lies in a detailed analysis of the target audience, in the development of a concept and creative idea, in the creation of multimedia materials (banners and presentations), in well-thought-out media planning, and in continuous monitoring, reporting, and further optimization. The next steps, therefore, are the analysis of the target audience and the development of advertising materials for the construction-materials store.

4.2 Psychographic analysis of the target audience.

To develop effective multimedia advertising content it is necessary to carry out a psychographic analysis of the target audience

Psychographic analysis – that is, an understanding of the audience's pains, fears, and motives – is needed in order to create a creative asset that will truly «hook» the user and elicit the desired reaction [10]. In this process, the multimedia creative (for example, a banner) works as the first filter: it helps Google Ads algorithms more quickly understand which users are the target ones. This accelerates the system's learning phase and improves advertising effectiveness, in particular the iROAS indicator, in accordance with the principles of early campaign diagnostics.

The target audience of the project consists of owners of private houses that are being built or undergoing major renovation.

To carry out the segmentation of the target audience of the construction-materials retailer, an analysis of the web resource's data set was performed with the following parameters:

- analysis period: 01.01.2025 – 31.10.2025 (10 months), which makes it possible to eliminate the influence of short-term seasonal fluctuations;
- data source – export data from Google Analytics 4 (GA4).
- sample size – more than 160,000 users, which ensures high statistical significance of the conclusions.

The purpose of the analysis is to identify priority segments for scaling PMax campaigns.

Analysis of the age structure of users demonstrates a clear shift of the distribution toward a mature, solvent audience, which is typical of a market with a high average order value (High ACV).

The 18-24 segment accounts for only about 5.5%, which indicates the low effectiveness of broad targeting on a younger audience. Decisions to purchase expensive construction materials are more often made by users aged 35 and above, since they typically own real estate or work professionally in the construction sector.

Therefore, a decision was made to exclude the «18-24» age segment from the PMax settings in order to optimize the budget (Table 2).

Table 2 – Distribution of active users by age

Age	Active users	Share (of identified)	Strategic interpretation
35-44 years	46 973	29.34%	Core A: Active homeowners and foremen
45-54 years	35 125	21.94%	Core B: Real-estate investors
55-64 years	28 321	17.69%	Conservative buyers (B2C)
25-34 years	23 327	14.57%	Young families (first home)
18-24 years	7 850	4.90%	Irrelevant traffic (students)
Other	18 477	11.54%	Irrelevant traffic (retirees)
Total	160 073	100.00%	

Analysis of interest categories helps in practice to separate the two main audience groups – B2C and B2B – discussed in the theoretical part. The B2C segment consists of private users interested in renovating or arranging their own homes. The B2B segment consists of professional market participants: builders, installers, designers, and contracting companies (Table 3).

Table 3 – Top 5 audience interest categories per GA4

Interest category (Google Taxonomy)	Active users	Segment type	Diagnostic value
News / Avid News Readers	54 855	General	Low (informational noise)
Vehicles / Auto Enthusiasts	27 513	B2B / B2C	High: Marker of mobility (foremen or suburban residents)
Home & Garden / Decor Enthusiasts	26 441	B2C	Critical: Direct interest in renovation
Banking / Avid Investors	21 777	High Net Worth	High: Marker of high income and an investment-oriented approach
Travel / Travel Buffs	18 956	B2C	Medium (lifestyle)

The high share of users from the «Auto Enthusiasts» and «Investors» categories confirms the hypothesis of the bimodality of the audience. This means that it consists not only of people doing renovations for themselves but also of a noticeable cluster of professionals and investors. Such a structure requires different approaches to communication: for car enthusiasts, more rational messages are appropriate, while for investors, image-driven and value-driven creatives are more effective.

Owing to such analysis, it is possible to see clearly which interests belong to each group and to configure the advertising more accurately.

Next, we will conduct an analysis of user geography (Table 4)

Table 4 – Top 5 cities by user activity

City	Active users	Deviation from leader (Kyiv)	Logistics cluster
1. Kyiv	58 873	–	Center (Capital)
2. Lviv	53 544	-9.0%	West (Hub)
3. Dnipro	12 364	-79.0%	East
4. Odesa	9 609	-83.6%	South
5. Ternopil	6 691	-88.6%	West (Satellite)

Analysis of user geography revealed an important pattern that differs noticeably from the typical distribution for Ukrainian e-commerce. The gap between Kyiv and Lviv turned out to be minimal (less than 10%), whereas the large million-plus cities of the East and South (Dnipro and Odesa) demonstrate activity 4-5 times lower. This

dynamic in effect confirms the hypothesis of a pronounced regional concentration of interest in Western Ukraine.

The high indicators for Ternopil, which exceed those expected for cities of its scale, additionally support the effectiveness of a radius-based targeting strategy. Users from these regions have higher conversion potential, since logistics works faster for them and the brand is more recognizable.

On the basis of the obtained data (ground truth), the theoretical model of the target audience needs to be refined in order to form the final multimedia strategy.

The adjustments are as follows.

1. Demographic filter.

It is advisable to shift the display budget to the 35–64 age group – it is precisely this segment that demonstrates the highest solvency and readiness for large purchases. The youth segments can be confidently excluded, since they do not affect conversion in the construction-materials categories.

2. Geographic prioritization.

For the Western region (Lviv, Ternopil, Ivano-Frankivsk) it is worth creating separate asset groups with their own value propositions – first and foremost regarding logistics, delivery speed, and local brand recognition. This cluster demonstrates the highest potential.

3. Audience signals.

The Auto Enthusiasts and Avid Investors segments have proved to be non-obvious but statistically significant indicators. They can be used as signals for the PMax algorithms, which will help the system more accurately identify users with high conversion value.

A retrospective analysis of historical Google Analytics 4 data (more than 160,000 users) made it possible to confirm the key provisions of the theoretical model and to identify the necessary adjustments.

Based on the results of the target-audience analysis, the following conclusions can be drawn:

- the hypothesis about the effectiveness of broad reach was not confirmed. The main conversions are generated by the 35–64 age group. Disabling the 18–24 segment makes it possible to allocate the budget more effectively and to increase LTV at the level of the entire campaign.

- a geo-logistical cluster was identified. The Western region demonstrates activity comparable to, or higher than, that of Kyiv, while other large cities lag significantly behind. This means that the optimal strategy will be not a nationwide one, but a cluster-based one with an emphasis on the West.

- the high share of users with interests in cars, investments, and construction confirms the two-component structure of the audience: domestic buyers (B2C), specialists and investors (B2B).

This makes it possible to use these segments as effective signals for training the Google Ads neural network, increasing targeting accuracy and the overall iROAS.

4.3 Development of multimedia advertising content.

The decision-making process of construction-materials buyers is characterized by high financial and time risks, which generate five key psychographic pains that must be reflected in multimedia creatives (Table 5).

Table 5 – Key psychographic pains for the target audience

Pain category	Description of fear	Requirements for the creative
1. Economic uncertainty	Fear of inflation: «While I am thinking it over, the price will go up by another 20%.»	Emphasis on urgency and on price lock-in as a strategic advantage.
2. Quality and durability	Fear of poor-quality material: «In 5 years the roof will rust or fade in the sun.»	Focus on warranties, premium brands (RUUKKI), and visualization of reliability.
3. Risk of calculations	Fear of an error in calculations: «I will buy too much (and overpay) or too little (and have to find the extra).»	Offer of expert/engineering calculation as a service that saves budget.
4. Complexity of the process	Complexity of the process: «I have to find materials, then a truck, then craftsmen... It's long and complicated.»	Promotion of a «turnkey solution» to remove the logistical burden.
5. Distrust of online sellers	Fear of fraud: «What if they cheat me? Where do I find them afterwards?»	Use of social proof (Google rating) and demonstration of a real presence (warehouses, addresses).

An effective multimedia strategy requires a direct translation of the identified psychographic pains and fears into specific creative hypotheses. In the course of the research, seven display banners were developed. Their concepts respond to the five key psychographic needs of the target audience (see Table 5). Each concept is aimed at one specific pain/fear, which maximizes creative resonance and, accordingly, CTR (Display) and Free Clicks – the key leading indicators for AI (Table 6).

Table 6 – Developed concepts for display banners

Banner concept	Target pain (fear)	Headline (H1) / main message	Visual emphasis	Diagnostic indicator
1	2	3	4	5
1. Anti-inflation	Economic uncertainty	Worried that the price of metal roof tiles will rise again? / Lock in today's price.	Graphic element: a red «stop sign» or a lock on the price tag.	Free Clicks (assessment of offer attractiveness).

Table 6 Continued

1	2	3	4	5
2. Durability and quality	Poor-quality material	A roof that does not rust and does not fade for 50 years / Premium-class metal roof tiles with an official warranty.	Macro shot of the texture of high-quality metal roof tiles with raindrops.	CTR (Display) (assessment of relevance for the premium segment).
3. Turnkey solution	Complexity of the process	We don't just sell metal roof tiles – we build the roof «turnkey» / Professional calculation, delivery, installation.	Split screen: chaos on the construction site (b/w) vs. an ideal finished roof (color).	Asset rating 'Good' (assessment of composition quality).
4. Accuracy and savings	Error in calculations	Don't overpay for extra meters of roofing! / We will do a free engineering calculation.	An engineer or manager with a tablet displaying a roof drawing.	Expected CTR (assessment of the savings promise).
5. Speed and availability	Complexity of the process (timeframes)	Metal roof tiles in stock at the warehouse! / No need to wait for weeks. Shipment within 24 hours.	Photograph of a full warehouse with pallets of metal roof tiles, a forklift.	Free Clicks (assessment of offer urgency).
6. Social proof / Trust	Distrust of online sellers	They trust us with their roof. / Rating 4.5 on Google based on 179+ reviews.	A collage of real photos of completed customer projects + graphics with Google stars.	Ad Strength 'Excellent' (assessment of persuasiveness).
7. Brand focus (RUUKKI)	Poor-quality material (premium segment)	Finnish metal roof tiles RUUKKI. / The benchmark of roofing quality. Official warranty.	A stylish, «upscale» photograph of a house with a Ruukki roof. The brand logo is clearly visible.	CTR (Display) (assessment of demand for a specific brand).

All banners are designed with PMax adaptability in mind: a clear hierarchy, a strong offer, a contrasting call-to-action button (CTA), and the use of a brand color for emphasis (Fig. 9).

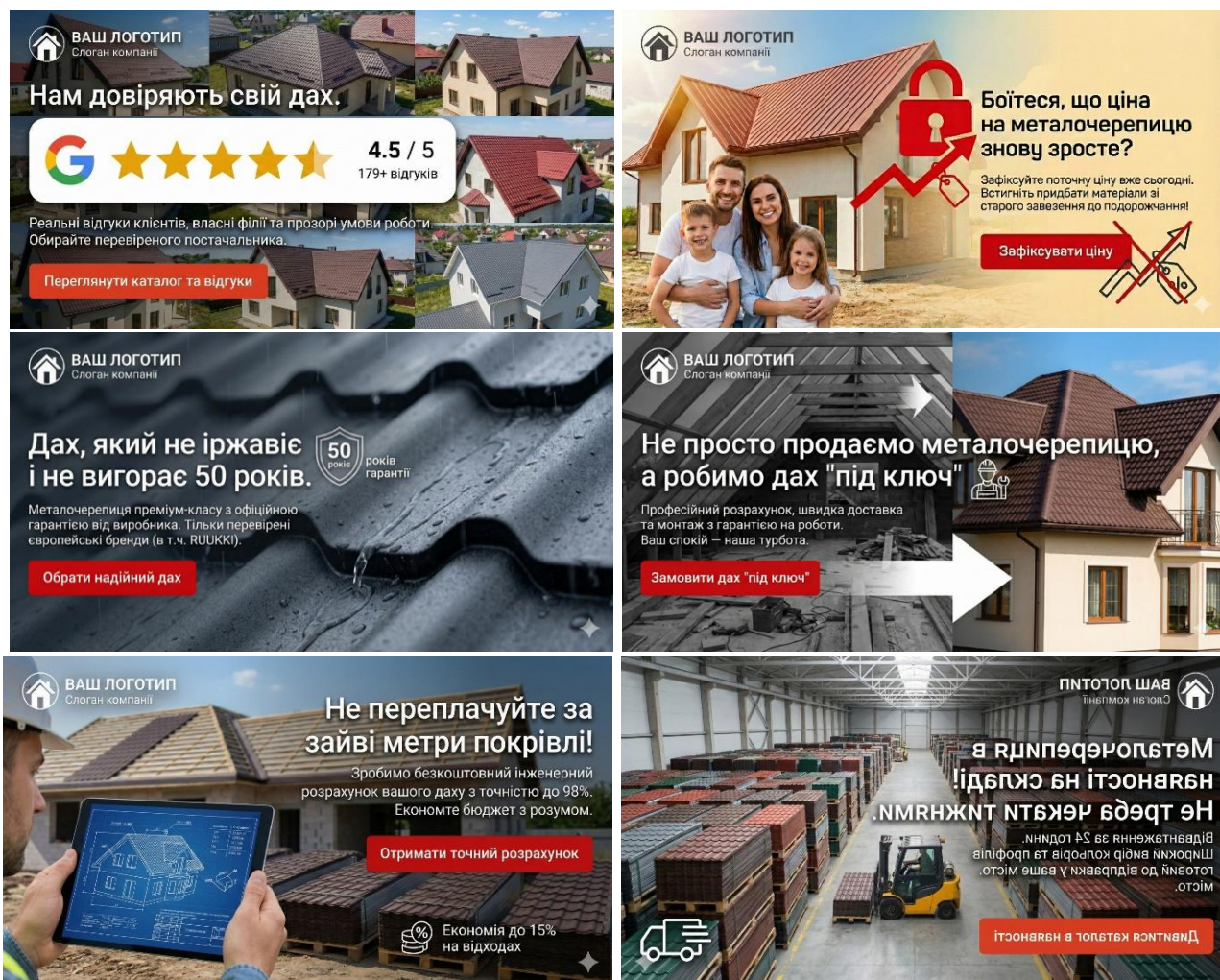


Figure 9 – Examples of advertising banners

A key diagnostic challenge for the developed display materials at the early stages is the «engagement paradox». This is a situation in which a banner has high creative resonance (for example, a high volume of Free Clicks) based on creative-resonance metrics but at the same time demonstrates a low final conversion rate (CR).

There are several reasons for this paradox:

- non-target audience – that is, the advertising material is emotionally appealing but does not contain sufficient qualifying information (for example, prices or specifications), which attracts non-solvent customers;

- relevance gap. The banner's message (for example, the promise of «the lowest price») does not match the landing-page experience (high price, a complex lead magnet), which leads to the loss of the user at the last step – something confirmed by the empirical analysis of the relevance gap.

If during early diagnostics the asset rating shows a «Low» value, this is grounds for the immediate replacement of the creative – that is, for the development and substitution of multimedia advertising materials. In this way, at the early-diagnostics stage, a direct intervention is performed in the work of the AI algorithm, based on the failure of the creative to achieve the target psychographic resonance. And

psychographic analysis acts as a practical diagnostic tool for increasing the effectiveness of the multimedia advertising campaign.

The psychographic analysis carried out for the target audience of the construction-materials store made it possible to transform statistical audience profiles into specific scenarios of adaptive display content. It was determined that creative resonance, measured through Free Clicks and CTR (Display), is a critical leading indicator that accelerates the learning phase of AI algorithms and prevents non-targeted spending. The diagnostics of creatives should be focused on the use of these metrics for the timely detection of the engagement paradox and the activation of a «Go/No-Go» decision rubric for the replacement of assets.

This concept has been implemented in the multimedia banners, but further development of video advertising for YouTube is planned.

4.3 General description of the methodology.

Stage one – preparatory. At this stage, the keyword set (semantic core) is developed. The Google Ads keyword set is the foundation of any advertising campaign in Google – a set of keywords and phrases that most accurately describe your product, service, or advertising topic. An example of keywords for the construction-materials store project is shown in Figure 10.

The quality of the keyword set determines whether your advertising will actually reach the target audience and how effectively the advertising budget will be spent.

The keyword set is a «dictionary» of all user queries that may lead to the display of your advertising. Google Ads uses it in order to understand to whom to show your ads [17, 19].

	A	B	C	D	E
1	* Приклади ключових слів	Порівн. кількість	Рівень конкуренції	Ставка для показу верху сторінки	Ставка для показу згори сторінки
2	метало черепиця	9900.0	Високий	5,17	18,23
3	металопрофіль	9900.0	Високий	4,40	14,35
4	металочерепиц	9900.0	Високий	5,17	18,23
5	металочерепиця	9900.0	Високий	5,17	18,23
6	забор профнастил цена	90.0	Високий	5,24	15,24
7	крыша металочерепица	90.0	Середній	6,81	34,53
8	металопрофіль забор	90.0	Високий	4,78	10,66
9	металочерепиця guukki	90.0	Високий	6,99	25,97
10	прозорий профнастил	90.0	Високий	2,63	7,27
11	профнастил кровельный цена	90.0	Високий	4,46	15,24
12	профнастил на забор ціна	90.0	Високий	3,58	11,31
13	цена металочерепица	90.0	Середній	3,36	22,42
14	купити металопрофіль на забор	720.0	Високий	4,07	11,11
15	купити профнастил для забора	720.0	Високий	3,63	11,45

Figure 10 – Examples of keywords

The keyword set includes:

- high-frequency queries (HF) – popular queries with a large number of impressions. For example: «metal profile,» «transparent profiled sheet,» and so on;
- mid-frequency queries (MF) – more specific. For example, «price metal profile»;
- low-frequency queries (LF) – very precise, «warm» queries. For example, «metal profiled sheet price per meter.»

The keyword set is needed in order to:

- understand how users search for your product.
- optimize the advertising budget (do not pay for irrelevant clicks).
- create effective ad groups.
- analyze competitors and find niches with lower bids.
- improve CTR and conversion through an accurate match between the search query and the ad.

The main stages of creating a keyword set:

- a) gathering queries via Google Keyword Planner, Serpstat, Ahrefs, Ubersuggest, Key Collector;
- b) filtering (non-target queries are removed);
- c) grouping by topic, by user intent, and by product type;
- d) optimization (keywords are distributed across ad groups).

The forecast results based on the keyword set are presented in Figure 11.

Stage two – determining baseline metrics after the launch of the campaign in order to verify its effectiveness.

Evaluating the effectiveness of multimedia advertising campaigns in Google Ads is based on the analysis of key metrics and indicators, such as CTR (Click-Through Rate), CPA (Cost per Action), ROAS (Return on Ad Spend), ROI (Return on Investment), and the conversion rate (CR).

When analyzing advertising campaigns and planning subsequent ones, attention must necessarily be paid to these indicators. The more effectiveness is analyzed, the better the understanding of what works and what does not. In doing so, an intermediate result is obtained – which corrective actions are needed. However, the main drawback is that information is obtained only after the campaign has been launched, and in some situations it is impossible to do without preliminary forecasting.

Stage three – the use of automated Google Ads strategies.

Automated Google Ads strategies for launching multimedia advertising campaigns are smart management algorithms that use artificial intelligence to automatically configure bids, impressions, and the optimization of ads. Their goal is to achieve the maximum result in accordance with the set campaign objective: increasing clicks, impressions, the number of conversions, or improving the return on advertising investment (ROI).

These strategies operate on the basis of machine learning – the system analyzes user behavior, the context of impressions, the history of conversions, and thousands of signals (time of day, type of device, geolocation, audience interests, etc.) in order to show ads precisely to those users who are most likely to perform the target action.

<p>Ваш план може отримати 190 конверсій за 17 тис. грн із середнім щоденним бюджетом 580 грн ☺</p> <p>Коефіцієнт конверсії: 4,00%. Цінність конверсії: –</p> <p>Стратегія "Максимум конверсій" оптимізує ставки так, щоб ви отримували якнайбільше конверсій у межах призначеного щоденного бюджету. Редагувати Докладніше</p> <table border="1"> <thead> <tr> <th>Конверсій</th> <th>Сер. ціна за конверсію</th> <th>Кліки</th> <th>Покази</th> <th>Вартість</th> <th>CTR</th> <th>Сер. ціна за клік</th> </tr> </thead> <tbody> <tr> <td>190</td> <td>91 грн</td> <td>4,7 тис.</td> <td>92 тис.</td> <td>17 тис. грн</td> <td>5,2%</td> <td>3,6</td> </tr> </tbody> </table>							Конверсій	Сер. ціна за конверсію	Кліки	Покази	Вартість	CTR	Сер. ціна за клік	190	91 грн	4,7 тис.	92 тис.	17 тис. грн	5,2%	3,6
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Адреса	Кліки	Покази	Вартість	CTR	Сер. ціна за клік															
Україна	4 747,49	91 948,02	17 343,30 грн	5,2%	3,65 грн															
<p>Ваш план може отримати 258 конверсій за 31 тис. грн із середнім щоденним бюджетом 1 тис. грн ☺</p> <p>Коефіцієнт конверсії: 4,00%. Цінність конверсії: –</p> <p>Стратегія "Максимум конверсій" оптимізує ставки так, щоб ви отримували якнайбільше конверсій у межах призначеного щоденного бюджету. Редагувати Докладніше</p> <table border="1"> <thead> <tr> <th>Конверсій</th> <th>Сер. ціна за конверсію</th> <th>Кліки</th> <th>Покази</th> <th>Вартість</th> <th>CTR</th> <th>Сер. ціна за клік</th> </tr> </thead> <tbody> <tr> <td>258</td> <td>120 грн</td> <td>6,5 тис.</td> <td>100 тис.</td> <td>31 тис. грн</td> <td>6,4%</td> <td>>4,7</td> </tr> </tbody> </table>							Конверсій	Сер. ціна за конверсію	Кліки	Покази	Вартість	CTR	Сер. ціна за клік	258	120 грн	6,5 тис.	100 тис.	31 тис. грн	6,4%	>4,7
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Україна	6 451,93	100 317,31	30 761,40 грн	6,4%	4,77 грн															
<p>Ваш план може отримати 351 конверсію за 59 тис. грн із середнім щоденним бюджетом 2 тис. грн ☺</p> <p>Коефіцієнт конверсії: 4,00%. Цінність конверсії: –</p> <p>Стратегія "Максимум конверсій" оптимізує ставки так, щоб ви отримували якнайбільше конверсій у межах призначеного щоденного бюджету. Редагувати Докладніше</p> <table border="1"> <thead> <tr> <th>Конверсій</th> <th>Сер. ціна за конверсію</th> <th>Кліки</th> <th>Покази</th> <th>Вартість</th> <th>CTR</th> <th>Сер. ціна за клік</th> </tr> </thead> <tbody> <tr> <td>351</td> <td>170 грн</td> <td>8,8 тис.</td> <td>108 тис.</td> <td>59 тис. грн</td> <td>8,1%</td> <td>>6,7</td> </tr> </tbody> </table>							Конверсій	Сер. ціна за конверсію	Кліки	Покази	Вартість	CTR	Сер. ціна за клік	351	170 грн	8,8 тис.	108 тис.	59 тис. грн	8,1%	>6,7
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Україна	8 784,79	108 132,67	59 461,80 грн	8,1%	6,77 грн															

Figure 11 – Keyword planner forecast results

Instead of manually managing bids, Google Ads independently determines the optimal audience and the time for displaying ads; automatically adjusts bids in real time depending on the probability of conversion; and distributes the budget across campaigns, ad groups, and advertising placements (YouTube, Gmail, partner sites, mobile applications) in order to achieve the highest effectiveness.

Types of automated Google Ads strategies for multimedia campaigns:

- Maximize Clicks. Goal – to obtain as many clicks as possible within the set budget; suitable for test campaigns, for increasing traffic, and for expanding the audience;

- Maximize Conversions. Goal – to obtain as many conversions as possible (leads, purchases, calls). The algorithm learns from the conversion history and shows ads to users who are more likely to perform the target action. Suitable for campaigns with conversion tracking configured;

- Target CPA. Goal – to obtain as many conversions as possible at a given average cost. The system automatically changes bids at auctions in order to reach this average price;

- Target ROAS. Goal – to maximize profit, orienting itself toward the ratio of expenses to revenue. Suitable for e-commerce, where the value of each purchase can be tracked;

- Target Impression Share. Goal – to ensure maximum visibility of ads (for example, so that the brand is always «in sight»). Suitable for brand-awareness campaigns or for the launch of new products;

- Smart Bidding strategy (Smart Display Campaigns).

This is a fully automated multimedia campaign in which Google itself selects the audience, creates combinations of headlines, images, and texts, and optimizes bids for conversions. Only the goal (for example, leads on the site), the budget, and the media (banners, video, logos, texts) can be set. Everything else the system does automatically, using artificial intelligence and machine learning [5, 16].

However, the main drawback of these strategies is the need to process a large volume of data, which makes them impossible to use at the early-diagnostics stage.

Stage four – a systematic audit of traffic.

This is a comprehensive review of all channels and sources of site visitors with the aim of determining:

- which sources bring valuable traffic (users who perform target actions);
- which users spend the budget without yielding a return;
- how the quality of traffic changes over time (behavioral factors, engagement indicators, scroll depth);
- how advertising investments affect ROI (Return on Investment).

The purpose of such an audit is to identify weak points in the funnel, adjust the budget, and restore the effectiveness of advertising campaigns without a complete relaunch. That is, when profitability falls, it is necessary to look for the causes and analyze where and why the forecasts do not coincide with the actual results.

A systematic traffic audit is not merely a check of advertising but a strategic tool for managing profitability. It makes it possible to take well-founded decisions about the advertising budget, to increase its profitability, and to create a foundation for early diagnostics of effectiveness, which is especially relevant for Google Ads and multimedia campaigns.

Stage five – offline conversions.

Offline conversions are one of the most important tools of the «advanced level» of working with Google Ads, which allows one to go beyond the standard tracking of clicks and lead forms. This is a user action that took place outside the internet but was initiated through interaction with online advertising [10].

More simply: a person clicked on the advertising, filled out a form, or made a phone call – and made the purchase, signed the contract, registered, or paid already outside the site (in a store, bank, clinic, office, and so on).

Without taking offline events into account, Google Ads sees only part of the picture.

«There was a click → a lead was submitted → what happened next is unknown».

But in fact, some leads may not lead to a sale, and sometimes the opposite happens – the customer does not submit a lead but calls or comes in independently. Offline conversions make it possible to close the chain from a click to a real purchase (Fig. 12).

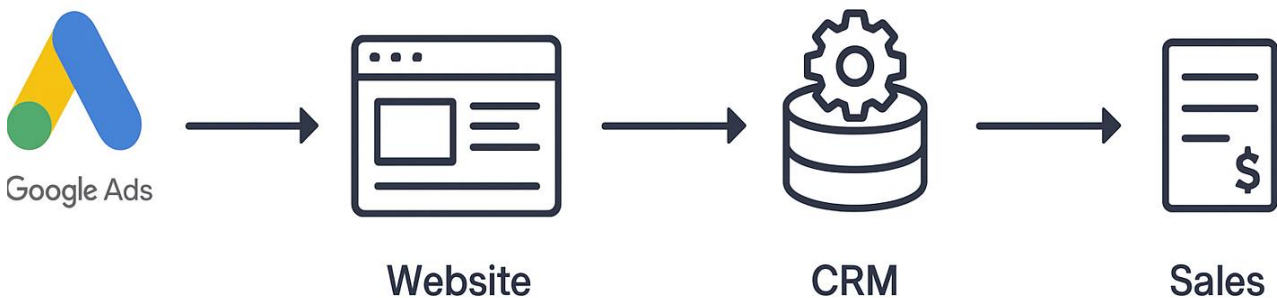


Figure 12 – Diagram of offline conversion

When Google Ads uses only online conversions (form, click, view), the system is optimized based on surface-level indicators. But if offline conversions are connected, then the campaigns learn on the basis of profitability. That is, Google understands which keywords, ads, and audiences bring in customers who actually buy; the Smart Bidding algorithm becomes more accurate, because it operates not on leads but on sales.

Thus, offline conversions are the foundation for building highly effective campaigns and automated strategies of the «Maximize Conversion Value» type. Their application will make it possible, immediately after the launch of an advertising campaign, to activate real orders and sales of construction materials by store customers, reducing time and money spent on developing automated Google Ads strategies.

It is precisely this approach that has been used to develop a methodology for early diagnostics of multimedia campaign effectiveness in Google Ads for a construction-materials store.

Stage six – modeling of the financial funnel. This is a method for analyzing and forecasting the effectiveness of marketing or advertising campaigns through the construction of a model that shows the user's journey from the first contact with the advertising to the financial result (profit or ROI) [6].

In other words, it is a mathematical or analytical reproduction of the movement of money in the sales funnel, which makes it possible to understand at which stage the campaign loses effectiveness and how to increase profitability.

The financial funnel is not merely the number of clicks or leads. It shows how investments in advertising are transformed into profit through all the stages of user interaction with the business. The typical structure of the Google Ads financial funnel is presented in Table 7.

Table 7 – Structure of the Google Ads financial funnel

Stage No.	Stage	Metric	Explanation
1	Advertising costs	Ad Spend	How much has been invested in the campaign
2	Impressions → Clicks	CTR, CPC	How the advertising attracts attention
3	Clicks → Leads	Conversion Rate	How many users performed the target action (lead, call)
4	Leads → Sales	Lead-to-Sale Rate	What share of leads converts into sales
5	Average order value	AOV (Average Order Value)	Average revenue per deal
6	Profit / ROI	Return on Investment	Result of investment effectiveness

The decision-making funnel forms a holistic view of the user's journey from the first touch with the brand to making a purchase. For the construction-materials market (especially for expensive and technically complex products such as roofing systems), this journey is gradual and includes both rational and psychographic factors.

The proposed financial-funnel model for the construction-materials store is adapted to Google Ads multimedia campaigns.

Stage 1 – Awareness.

What is happening. The user realizes that they need to do a renovation or replace the roof, but they do not yet know which materials will suit them.

Typical need triggers:

- the start of construction;
- major renovation;
- an emergency condition of the roof;
- neighbors/acquaintances have completed roofing work;
- seasonal factors (before the rains/winter).

Marketing tools:

- display banners (PMax, Display);

- YouTube Ads for demonstrating brands (for example, Ruukki);
- broad interest-based audiences: *renovation, construction, architecture*.

Psychographic pains worth addressing:

- fear of a high price;
- fear of the complexity of the process;
- distrust of sellers.

Stage 2 – Interest.

What is happening. The user begins to search for information, comparing materials, brands, prices, and installation technologies.

Behavioral signs:

- viewing videos about installation;
- reading blogs on the choice of materials;
- searching for «comparison of metal roof tiles,» «which roof is better,»

«warranty on roofing.»

Marketing tools:

- Performance Max + Audience Signals;
- remarketing to site visitors;
- creatives focused on values (durability, warranties, awards, brands).

Key arguments at this stage:

- reliability;
- certification;
- «official 50-year warranty»;
- photos of real projects.

Stage 3 – Consideration.

What is happening. The user narrows the choice to 2–3 supplier options.

Typical actions:

- viewing specific series of metal roof tiles;
- checking the availability of the product in stock;
- reading reviews;
- clarifying delivery.

Marketing tools:

- Display remarketing;
- creatives «turnkey solution»;
- emphasis on accurate calculations: «We will do a free engineering calculation of the roof.»

Decisive factors:

- delivery speed;
- availability of the material;
- the company's reputation;
- transparent calculations.

Stage 4 – Intent.

What is happening. The user is ready to contact the company but wants to clarify details.

Behavioral signals:

- adding items to the cart;
- calls or clicks on the «Call back» button;
- viewing the «Contacts» section;
- downloading price lists.

Marketing tools:

- PMax with conversion optimization;
- remarketing to warm leads;
- banners with emphasis: «price locked in,» «discount until the end of the month,» «delivery within 24 hours.»

Marketing tasks:

- remove fears and doubts;
- simplify the user's path to a call/lead form as much as possible.

Stage 5 – Conversion.

What is happening. The user makes a purchase or orders a calculation service.

Factors that influence a successful conversion:

- the manager's quick response;
- the competence of the consultation;
- the possibility of getting everything in one place: material + delivery + installation;
- a final price that matches the one quoted.

Marketing tools:

- Performance Max with optimization for conversion value;
- automated strategies Maximize Conversions or Maximize Conversion Value.

Stage 6 – Repeat purchases and recommendations (Loyalty & Advocacy).

What is happening. The customer returns for additional components, or recommends the company to acquaintances.

Supporting activities:

- email marketing;
- Google Ads remarketing (180-day list);
- banners with cross-offers: gutters, insulation, soffits, and so on.

Result:

- increase in LTV (lifetime customer value);
- reduction in the cost of new leads.

At each stage, different types of display creatives and different audience signals are used, which makes it possible for Google Ads to automatically optimize campaigns in accordance with actual user behavior.

Stage seven – the use of mathematical models within the Google Ads system to automate the analysis of effectiveness, forecast results, and adapt to behavioral changes in the audience.

The sixth and seventh stages will be used in accordance with the specifics of the developed multimedia advertising campaigns (their content, target audience, budget, and so on).

Results and recommendations

For small advertising campaigns, or for enterprises that have physical points of sale (stores, salons, schools, clinics), offline conversions can act as the main tool. This tool, specifically, makes it possible to:

- determine what percentage of online leads actually convert into sales;
- understand which keywords, audiences, or advertising formats bring in the greatest profit;
- automatically adjust the budget, focusing on the effective directions.

To do this, it is necessary to collect data about users who interacted with the advertising (Google Click ID, or GCLID). This can be done from the first day of the campaign launch.

In the CRM or in Excel/Google Sheets, the moment of the real event is recorded – «sale», «signing of the contract», «office visit».

This data is then imported back into Google Ads through the Offline Conversions Import function. Google «learns» which clicks lead to real buyers and optimizes campaigns automatically.

For large campaigns, the early-diagnostics procedure is more complex. Taking into account the preceding analysis of the target audience (owners of private houses being built or undergoing major renovation), the nature of the product (metal roof tiles, roofing systems), and the high cost of a wrong decision, the optimal strategy is Performance Max:

Main reasons for the choice:

- the algorithm uses all available Google placements (YouTube, Display, Search, Discover, Maps), which expands points of contact with the audience;
- the system automatically analyzes the most productive creatives and audience signals;
- PMax has a high ability to adapt to a complex purchase process and a long decision-making cycle;
- relevance for products with a large number of informational queries and a need for retargeting;
- the possibility of optimization for specific business goals: obtaining leads or sales.

Practical advantages:

- an increase in the number of high-quality leads at a stable cost;
- an accelerated learning phase thanks to creative signals from the multimedia banners;
- optimization of expenses through directing the budget to the most effective placements;
- reduction of the marketer's manual work through the automatic testing of creative variations.

Basic recommendations for the early stages of a campaign launch can also be formulated.

At the start, the advertising system needs time to collect enough data to accurately forecast user behavior. Therefore, it is advisable to use strategies that quickly accumulate audience signals, do not require a prior history of conversions, and make it possible to test the quality of creatives and hypotheses.

The recommended strategies at the early stages are as follows.

1. Maximize Clicks. Used for the rapid diagnostics of creatives and makes it possible to assess:

- CTR,
- the level of initial interest,
- the relevance of psychographic messages.

2. Maximize Reach. Suitable for broad reach, when it is important to:

- fill audience segments,
- launch the early learning phase of PMax,
- test banners created on the basis of psychographic pains.

After statistics have been accumulated, the campaign is smoothly transitioned to Performance Max or to a target strategy (Target CPA).

Automated Google Ads strategies correspond to the modern principles of digital advertising:

- a data-driven approach (the system bases decisions on real user signals – interests, behavior, site history);

- reduction of the human factor (the risk of errors in bid configuration is reduced);

- adaptability (the algorithm constantly recalculates optimal audiences and formats);

- a full cycle of optimization (from reach to conversion without loss of data between stages);

- synergy with psychographic creatives, which act as key «quality signals» for the early learning phase.

For the construction-materials market, where decisions are made over a long time and users return to search repeatedly, automated strategies ensure stable development of the funnel and optimization of advertising expenses.

Prototype tools for testing the methodology can be presented in the form of an interactive table, dashboard, or script, along with results from the approbation of the developed methodology using real Google Ads advertising campaigns as examples (Fig. 13).

For multimedia campaigns of a construction-materials store, the optimal automated strategy is «Maximize Conversions» or «Maximize Conversion Value». These allow Google's algorithms to find the warmest audience segments, shorten the campaign's learning period, and increase the return on advertising investment.

With sufficient statistics available, it is also advisable to use Target CPA or Target ROAS for further optimization of the budget and the cost of customer acquisition.

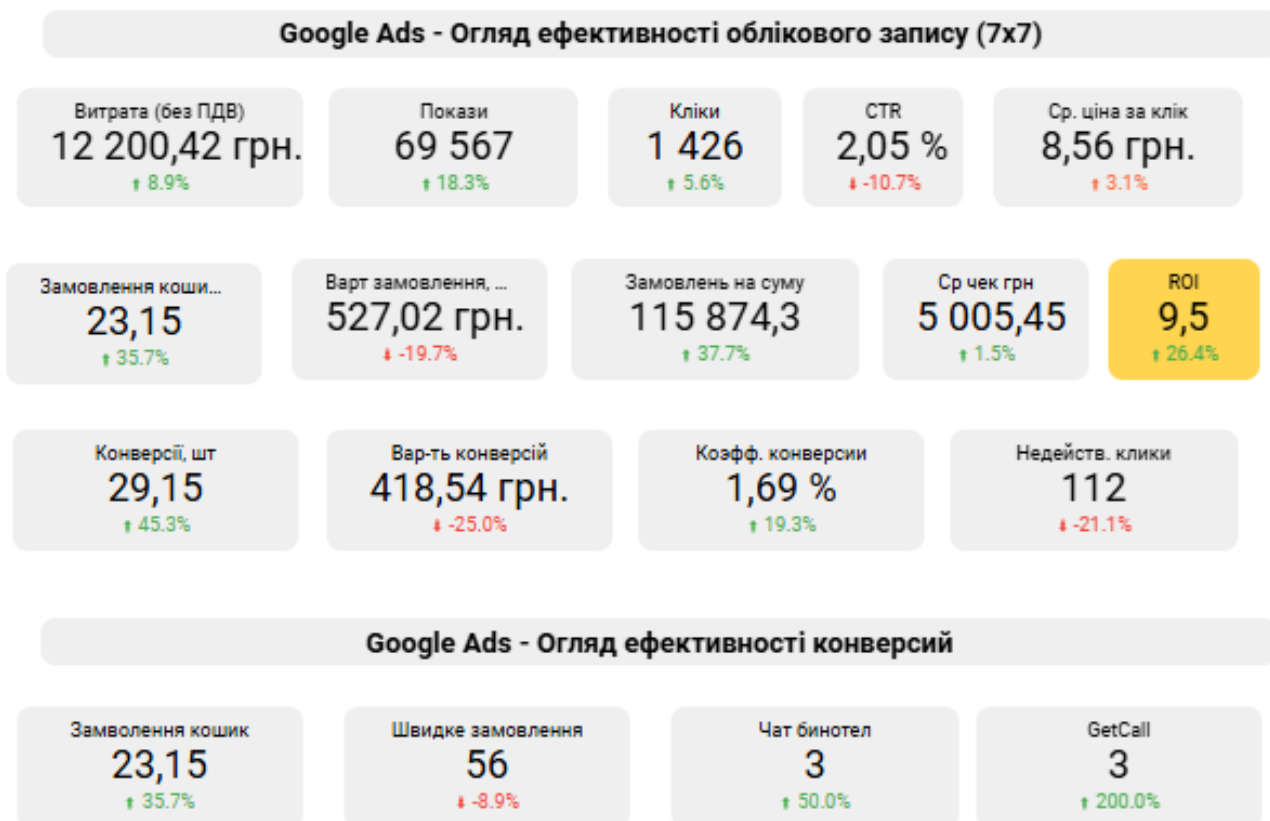


Figure 13 – Testing prototype

At the early stages of launching a multimedia campaign, it is best to use automated strategies oriented toward attracting an audience and collecting data, rather than toward immediate conversions. This helps to pass through the Google Ads algorithm's «learning» phase more quickly and to create high-quality signals for further optimization.

Recommended automated strategies for the early stage.

Maximize Clicks – for gathering the audience. This is the best strategy at the very start; it makes it possible to quickly attract traffic to the site. It forms primary data about the behavior of the audience, which is critical for subsequent strategies, and it is well suited if it is necessary to collect an audience for remarketing and to train the system.

When to apply:

- the campaign has only just been launched;
- there are few historical conversions;
- it is necessary to quickly test creatives and audience signals.

Maximum Coverage (Target Impression Share) – for brand awareness. This strategy makes it possible to show your advertising more often in the right places (for example, at the top of the page). It works well if it is necessary to «establish the brand» among owners of private houses being built or renovated. It can be applied when it is necessary for the brand to appear as often as possible, or when a new product line or a new company is being launched.

Maximum Coverage in Video/Media (Video/Display Reach). Suitable for campaigns with banners and video (YouTube + Display). It allows the system to display ads to the broadest possible number of potential buyers. It can be applied when the building of trust is of great importance and when it is necessary to convey key messages about quality, warranties, the availability of warehouse stock, branded products, and so on.

For a company that sells construction materials (metal roof tiles, profiled metal sheet, «turnkey» services, and so on) and has an audience that takes a long time to make a decision, the following sequence of strategies can be recommended (Table 8).

Table 8 – Sequence of automated strategies for the early stage

Goal	Best strategy
Quickly gather traffic and audience	Maximize Clicks
Make the brand visible	Impression Share / Maximize Reach
Test creatives and audience signals	Maximize Clicks
Launch PMax without history	Maximize Conversion Value (without tROAS

At the early stage, target-CPA (tCPA) or target-ROAS (tROAS) strategies should not be used. They are not suitable for the start because they require statistics on conversions; they work unstably if the data is insufficient; and they may «cut off» impressions to audiences that have not yet learned about the store.

At the early-diagnostics stage, recommendations for the client are also prepared. These set out the main operations for launching the advertising campaign that need to be performed in order to begin work on configuring the account. Some adjustments can also be made during the course of work, but they will directly affect the payback of the advertising.

Conclusions

Under conditions of intense competition, contextual advertising is an integral component of the successful development of a business. This method makes it possible to advertise products or services exclusively to those users who are actively interested in them.

The main advantages of Google Ads advertising for business are that you can accurately direct advertising messages to a specific target audience. It is precisely this that makes it possible to achieve effective conversion, to obtain a quick result, and to control the budget.

On this basis, it becomes clear that work on a methodology for early diagnostics of the effectiveness of Google Ads multimedia campaigns is both scientifically significant and practically useful [20-23].

It can provide:

- prompt detection of declining effectiveness of advertising elements;
- reduction in budget expenditures owing to the avoidance of continuing ineffective campaigns;
- increased control and transparency of advertising processes;
- improvement of the quality of advertising materials, audiences, and landing pages through feedback at the early stages.

The implementation of this methodology has shown the following results: the number of active users following the approbation and implementation of the methodology increased by almost 30,000 people; click-through and the visibility of banner advertising rose by nearly 1.5 times; and conversion grew to 2.2%. This ensures stable development of the decision-making funnel, increases the accuracy of target-audience reach, and optimizes the use of the client's advertising budget.

References.

1. Chen, J., & Stallaert, J. (2019). Modeling Online Advertising: A Review and Research Agenda. *Information Systems Frontiers*, 21(5), 1029-1056. <https://doi.org/10.1007/s10796-019-09919-y>
2. Mishra, A., Jain, R., & Agrawal, P. (2021). TSI: An Ad Text Strength Indicator using Text-to-CTR and Semantic-Ad-Similarity. arXiv preprint arXiv:2108.08226. <https://arxiv.org/abs/2108.08226>.
3. Effendi, N. M., & Ali, N. M. (2017). Click Through Rate Prediction for Contextual Advertising Using Linear Regression. arXiv preprint arXiv:1701.08744. <https://arxiv.org/abs/1701.08744>.
4. Wang, X., Jin, Q., Huang, S., Zhang, M., Liu, X., Zhao, Z., Chen, Y., Zhang, Z., Yang, J., Wen, E., Chordia, S., Chen, W., & Huang, Q. (2023). Towards the better ranking consistency: A multi-task learning framework for early stage ads ranking (arXiv:2307.11096). arXiv. <https://arxiv.org/abs/2307.11096>.
5. Яцюк, Д.В. (2018). Реклама в інтернеті (Навч. посібник). КНТЕУ. ISBN 978-966-629-907-2.
6. Котлер, Ф., & Армстронг, Г. (2022). Основы маркетингу. Київ: Науковий світ. ISBN, 978-617-7812-04-2.
7. Didenko, O. (2023). Content aspects of advertising images of modern media advertising in Ukraine. *Demiurge: Ideas, Technologies, Perspectives of Design*, 6(1). <https://doi.org/10.31866/2617-7951.6.1.2023.279067>
8. Мальчик, М.В., & Адасюк, І.П. (2021). Реклама в інтернеті: теоретичний аналіз та особливості. *Вісник Національного університету "Львівська політехніка"*. Серія: Проблеми економіки та управління, 5(1), 75-85. <https://doi.org/10.23939/semi2021.01.075>.
9. Вовк, О.В., Чеботарьова, І.Б., & Шарун, Д.А. (2024). Просування бренду дизайнера через LINKEDIN. Поліграфічні, мультимедійні та web-технології. Інновації та розвиток: монографія. (с. 59-81). Харків: ТОВ «Друкарня Мадрид».
10. Kotler, P., Kartajaya, H., & Setiawan, I. (2021). *Marketing 5.0: Technology for humanity*. John Wiley & Sons. ISBN 9781119668510.
11. Kushnir, T., & Moroz, M. (2025). Тенденції розвитку цифрових комунікацій в Україні. *Acta Academiae Beregsasiensis. Economics*, 9, 77-85. <https://doi.org/10.58423/2786-6742/2025-9-77-85>.
12. Епіцентр. (n. d.). <https://epicentrk.ua/>.
13. Нова Лінія. (n. d.). <https://www.nl.ua>.

14. Леруа Мерлен Україна. (n. d.). <https://www.leroymerlin.ua/>.
15. Google Ads Help. (n. d.). Оцінка ефективності кампаній у Google Ads. <https://support.google.com/google-ads/answer/2684769>.
16. Ключові показники для оцінки ефективності кампаній в Google Ads. URL:<https://imrev.agency/blog/key-performance-indicators-for-google-ads-campaigns>.
17. Google Analytics 4 Documentation. (n. d.). Key metrics and dimensions for campaign analysis. <https://support.google.com/analytics/answer/12195621>.
18. Чеботарьова, І.Б., & Баришева, В.С. (2021). Дослідження засобів підвищення ефективності реклами. Поліграфічні, мультимедійні та web-технології. Т. 1. (с. 141-143).
19. Chaffey, D., & Ellis-Chadwick, F. (2025). Digital marketing: Strategy, implementation and practice (9th.). Pearson Education. ISBN 978-1-292-73808-6.
20. Vovk, O., & Chebotarova, I. (2025). Effectiveness of a social media advertising of a football club. Innovations in publishing, printing and multimedia technologies 2025. (p. 49).
21. Кондратьєв, О.В., & Вовк, О.В. (2024). Використання SEO для поліпшення видимості бренду в пошукових системах. Поліграфічні, мультимедійні та web-технології. Т. 1. (с. 75-76).
22. Манаков, В.П., Чеботарьова, І.Б., & Артаков, М.А. (2025). Особливості ранньої діагностики ефективності мультимедійних кампаній у Google Ads. Сучасні стратегії економічного розвитку: наука, інновації та бізнесосвіта. (с. 60-63).
23. Чеботарьова, І.Б., & Попова, Є.О. (2024). Інтернет-маркетинг у видавничому бізнесі. Поліграфічні, мультимедійні та web-технології. Т. 2. (с. 215-217).