

Application of Organic and Paid Search in Audience Targeting

Yana PANCHEVA

University of Economics, Varna, Bulgaria
yana.pancheva@ue-varna.bg

Mariana MARINOVA

University of Economics, Varna, Bulgaria
mariana.marinova@ue-varna.bg

Abstract. *This paper examines how Search engine optimization (SEO) and Pay-per-click (PPC) interact and complement each other. Search engine optimization is a slow but effective process that gives results and provides organic traffic, while Pay-per-click (PPC) gives quick results and generates potential conversions in a much shorter time frame. The paper looks at how two radically different marketing approaches would interact most effectively when they work together. We'll also look at how search engines play a crucial role in targeting audiences by analyzing user behavior. Search engine optimization and Pay-per-click contribute to this process by collecting data on user behavior, keywords and above all by directing potential customers to products, services or information. Audiences are created and organized after the search engine has collected data from user behavior after SEO and Paid search have worked and collected data. Users often utilize Search Engines to find information, the best price, the best shop, and so on. Customers, reach what they want with keywords. This paper best practices and how both approaches would work for a given business. It paper also presents different viewpoints of different authors and gives positive or negative opinions on the topic. Including what are the best practices for using PPC and SEO and exploring how they would work best for businesses and how research results show that the combination of the two methods leads to increased conversions and increased ROI. This research also provides recommendations for the development of Digital Marketing strategies tailored to individual business needs that have been proven to significantly improve the online presence of a given business in the online space.*

Keywords: search engine optimization (SEO), organic search, pay-per-click (PPC), audience, targeting

Introduction

This paper explores how organic and paid search can be used strategically to effectively target audiences, analyzing the pros and cons of each method. This section explores what organic search means, as well as what paid search (PPC) means. This research, primarily focuses on Google as a search engine. 75% of Google users do not visit the second page, indicating the importance of optimizing websites and content for search engines. This is why SEO remains one of the most effective and widely used digital strategies. Google's crawlers must crawl the entirety of the website and all of its content to be able to deliver the most relevant and accurate information to users. When combined with paid search (PPC), this approach can yield strong results, as demonstrated in this paper. As mentioned earlier, this paper is focused specifically on Google and Google's tools. Google Ads is one of the most popular sponsored search platforms which displays ads in Google search results when a user searches for information about a product or service. Targeting is a crucial component of paid search as it allows advertisers to choose the keywords through which a user can discover them. Keywords are an important factor in setting up a paid advertisement, as well as in organic search, but not the most important. The paper also covers many other points below with which businesses can achieve incredible results by combining the work of an SEO specialist and a

PPC specialist. The end result is important for every business, and in Google search, it means making it easier for users to find the business—securing a spot on the first page and top rankings.

Literature review

Paid search

Pay-per-click (PPC) advertising, sometimes referred to as paid search, is a successful Internet advertising technique that is now a crucial component of business marketing plans. Based on the idea of charging advertisers for each click on their advertisements, this tactic enables businesses to stand out in search results and draw in the intended audience (Chaffey & Ellis-Chadwick, 2016). This supports the idea that PPC enables precise audience targeting, ensuring ads reach users who are actively searching for specific products or services, ultimately increasing conversion potential.

Google Ads is one of the most popular sponsored search platforms. Businesses may use this platform to display ads in Google search results when prospective clients look for information about the goods or services they provide. Targeting is a crucial component of paid search marketing because it allows marketers to select the keywords for which their advertisements will appear, directing their message in the most direct path to the intended demographic. (Chaffey & Ellis-Chadwick, 2016) This highlights the importance of keyword selection in audience segmentation, as well-targeted ads can significantly improve engagement. A deep understanding of search behavior is crucial for businesses to refine their targeting strategies continuously.

This tactic guarantees that the outcomes are measurable in addition to raising the brand's exposure in search results. With the use of paid campaign analytics, businesses can monitor and instantly modify their plans, optimize budgets, and assess the return on their efforts. In today's online world, integrating paid search marketing with other digital marketing tools is becoming essential to comprehensive plans that guarantee the successful promotion of goods and services. (Chaffey & Ellis-Chadwick, 2016) This supports the hypothesis that a combined approach improves audience targeting by leveraging both immediate paid traffic and long-term organic reach.

Organic search

Google updates its algorithms regularly so that only the relevant results come up. From that perspective, many experts say that SEO is dead and the effort is futile. However, the truth is that Google tries to prevent algorithm manipulation and filters sites that don't deserve to be on the top of SERPs (Search Engine Result Pages). It is clear that investing in SEO is crucial for success. Your website should address the technicalities related to content and query matching, spidering, indexing, and interpreting non-text content. Remember, it is the most cost-effective marketing strategy that will bring organic traffic to your business. (Dr. Madhu Bala & Mr. Deepak Verma, 2018) This aligns with the hypothesis that SEO remains a fundamental tool for audience targeting, as it allows businesses to attract organic traffic without relying on paid advertising. By focusing on content relevance, indexing, and site performance, businesses can reach their ideal audience in a cost-effective manner.

Working with SEO takes time and effort. The system that Google uses to create website rankings is mainly based on a complex algorithm called PageRank that determines a website's importance, but the Google ranking also takes website coding and speed in consideration. Because of this, a top search result ranking requires much time and a high degree of consistency, engineering, and website quality, which is why many companies instead choose to pay for a high

ranking using paid ads (especially newer companies). This reinforces the idea that SEO, though requiring patience, is a more sustainable approach to audience targeting.

SEO and PPC

Similar to PPC studies, research has shown that SEO campaigns can generate a high Return on Investment (ROI). It has also indicated that more than 50% of Google search results are definitely or most definitely influenced by SEO. According to Andrew Jacobs, digital marketing manager at mattress business Otty, their SEO based on the use of backlinks generates a 6:1 ROI, but they still use PPC for incremental profits “to supplement instant gains with longer-term growth planning requires investment in both SEO and PPC”. In a study conducted by Kritzinger W.T & Weideman M (2013), the results show that both SEO and PPC are required for maximum website exposure. Even though these points are evident, research shows that some companies only invest 13% of their marketing budget in SEO, which according to Kritzinger W.T & Weideman M (2013) makes sense as they identify some contradictions in terms of spending money on SEO or PPC. Some studies show that more users click on organic links than PPC results while other studies show that 4 spending on SEO does not make financial sense . This might be a result of inaccurate research regarding ROI. (Martin Dehlin & Qvintus Björnfort, 2023) This supports the hypothesis that integrating both SEO and PPC is crucial for effective audience targeting, as PPC provides immediate visibility while SEO ensures sustainable long-term growth.

Targeting audience

Traditional marketing is a non-digital way of showcasing a company’s products or services while digital marketing uses digital channels to reach potential consumers. For example, while traditional marketing includes areas such as print, broadcast, direct mail and telephone, digital marketing includes areas such as online advertising, social media, search engine optimization and pay-per-click marketing. Furthermore, digital marketing is a more interactive way to communicate with the audience. Within the framework of digital marketing is internet/online marketing. The main difference between digital marketing and internet/online marketing is that digital marketing also includes semi-traditional ways of marketing such as TV ads and digital billboards. (Martin Dehlin & Qvintus Björnfort, 2023) These distinctions emphasize the growing significance of search-based audience targeting, where SEO and PPC work together to create a comprehensive and adaptable marketing strategy.

Adapting new marketing trends in business (Zhechev, 2024) requires systematic efforts and specific knowledge. This adaption will help audience targeting. Moreover, the use of SEO methods generates big data which has to be analyzed (Mileva, 2024). Moreover, integrating this big data with existing software applications requires managerial conceptualization and financial costs (Penchev, 2024)

Methodology

Research Design

The present study aims to analyze the interaction between SEO (organic search) and PPC (paid search via Google Ads) as tools for effectively targeting audiences in the niche of natural products, herbs and spices. The main focus is finding some of the best practices for combining these two strategies to achieve an optimal balance between long-term visibility using online store optimization and short-term marketing results through the optimization of Google Ads campaigns. To achieve this goal, a mixed research approach was chosen, combining both qualitative and

quantitative methods. The qualitative analysis will focus on successful marketing practices and the study of real-life examples from an online store in this industry. The quantitative analysis will be based on data collected from digital tools for traffic analysis and advertising results, in order to evaluate the effectiveness of SEO and PPC in targeting the right audience.

Key definitions

Table 1. Key research areas using the concept of sequences and sequencing

Research area	Brief description	Key Authors
PPC - Pay-per-click	Pay-per-click is an advertising model that allows advertisers to place their result at the top of search results.	Kritzinger & Weideman, 2013
SEO	Search engine optimisation is the process of enhancing organic visibility of a website or listing by improving content, keywords, and other relevant ranking factors.	Kritzinger & Weideman, 2013
SERP	Search engine optimisation is the process of enhancing organic visibility of a website or listing by improving content, keywords, and other relevant ranking factors.	Alfiana, et al., 2023
Algorithm	A defined set of rules that is designed to solve a specific problem or task. Electronic marketplace: Electronic marketplace is defined as “an inter-organisational information system that allows the participating buyers and sellers to exchange information about prices and product offerings”.	Wang & Archer, 2007, p. 105
E-commerce	E-commerce is defined as “an exchange between producers and end consumers of goods, services and explicit knowledge about goods and services (or information about consumers) for available consumption in return for the actual or potential payment”.	Jewels & Timbrell, 2001, p. 5
Keyword	Word or phrase that is used to describe a desired result in a search. CPC: Cost-per-click, a metric that signals the monetary cost for each acquired click. Often in combination with PPC advertising.	Jonathan Bornemann, 2024
ROI	Return on investment, the monetary return on the budget used.	Fernande, 2024

Source: How brands grow on online marketplaces with the help of SEO and PPC, Jonathan B. (2024).

Data collection

The study relies on data collected from reliable digital tools that provide information on search trends, consumer behavior and the effectiveness of advertising campaigns. Data from Google Trends will be used to analyze the frequency of searches for keywords such as “natural spices” and “organic herbal teas”, as well as to identify seasonal trends in consumer search. Google Search Console will provide information on organic traffic, keyword positioning and the effectiveness of various SEO strategies.

Google Ads will be the main source of information for paid advertising campaigns, and metrics such as cost per click, conversion rate and user behavior after interacting with ads will be analyzed. For a more in-depth analysis of competitive strategies, tools such as SEMrush will be used, which will provide data on the link profiles of competitor sites, keyword selection and the effectiveness of their SEO practices.

Qualitative data analysis

The study will include an analysis of real-life examples of online stores that successfully use SEO and PPC to target audiences. Various strategies will be examined, including content creation, product page optimization, and the use of remarketing campaigns to reach potential customers.

It will examine how SEO strategies based on creating useful content contribute to long-term organic presence and building trust among users. At the same time, it will analyze how PPC ads allow targeting messages to specific audiences based on their interests and purchase intentions. Special attention will be paid to the combination of the two methods and how they can work together to increase engagement and conversions.

Research steps and limitations

The research will go through several main stages, including analyzing the key factors that influence the effectiveness of SEO and PPC, collecting and processing data, conducting a comparative analysis of different advertising approaches, and identifying successful strategies for integrating the two approaches.

The study's main limitations include the dynamic nature of Google's algorithms, which can affect SEO and PPC results at the time of analysis. Competitive pressures in digital marketing also pose a challenge, as the cost per click in PPC can vary significantly depending on competitor activity. Another limitation is the reliance on secondary data collected by analytical tools, which can be affected by external factors such as seasonality, global trends, and changes in consumer preferences.

Analytical model

The analytical model of the study is based on the concept that the combined use of SEO and PPC leads to better marketing results than the implementation of each strategy separately. SEO is used as a tool for the long-term development of an online presence, while PPC provides immediate access to the audience and faster results.

The model provides engagement, clicks and conversions analysis on sites that use solely SEO, solely PPC, or a combination of both. This will allow an assessment of how different strategies influence the effectiveness of digital targeting.

Critical analysis of existing research

In today's fast-paced e-commerce environment, the marketing strategies applied to products play a pivotal role in determining their success. Search engine optimisation (SEO) and pay-per-click (PPC) are two of the most important techniques that, when used together, can significantly enhance a product's performance at different stages of its lifecycle (Maio & Re, 2020). Previous studies in the field of digital marketing have highlighted the importance of SEO and PPC as key factors in increasing online traffic and sales. Sites that combine SEO and PPC have higher engagement and conversion rates, as they attract both information-seeking and purchase-ready

users. One of the key aspects of this combined approach is effective audience targeting. SEO helps reach users who are actively searching for information or solutions to a specific problem, while PPC allows targeting precise audiences based on their interests, behavior, and previous interactions with the brand. Similar to PPC studies, research has shown that SEO campaigns can generate a high Return on Investment (ROI) . It has also indicated that more than 50% of Google search results are definitely or most definitely influenced by SEO (Martin Dehlin & Qvintus Björnfort, 2023).

Results and discussions

Analysis of results and impact on audience targeting

This study focuses on how organic (SEO) and paid (PPC) search can be used for effective audience targeting. The results show that the combined approach leads to more precise targeting, increased user engagement and improved conversions. Analysis of Google Search Console data reveals that organic targeting through SEO provides sustainable long-term traffic by attracting users who are actively searching for information and have a high level of engagement intent. At the same time, PPC campaigns in Google Ads allow for more precise audience segmentation based on demographics, behavior, and previous interactions with the site.

Research data shows that when SEO and PPC are used together, businesses can reach different stages of the consumer journey. SEO works more effectively at the top of the funnel, attracting consumers who are still researching products or services. PPC, on the other hand, allows for targeting of consumers closer to making a purchase decision through retargeting or ads based on user intent.

Session primary...Channel Group) ▾ +	↓ Sessions	Engaged sessions	Engagement rate	Average engagement time per session	Events per session
Total	3,824 100% of total	2,290 100% of total	59.88% Avg 0%	41s Avg 0%	6.25 Avg 0%
Paid Search	2,382	1,511	63.43%	32s	5.03
Organic Search	775	449	57.94%	52s	7.06

Figure 1. Results from Paid and Organic Search

Source: Authors, own research, Google Analytics.

Figure 1. presents an analysis of how organic search (SEO) and paid search (PPC) contribute to different stages of the consumer journey. SEO is shown to be more effective in attracting users at the early stages when they are researching products or services, while PPC plays a key role in reaching consumers who are closer to making a purchasing decision through targeted advertising and retargeting strategies.

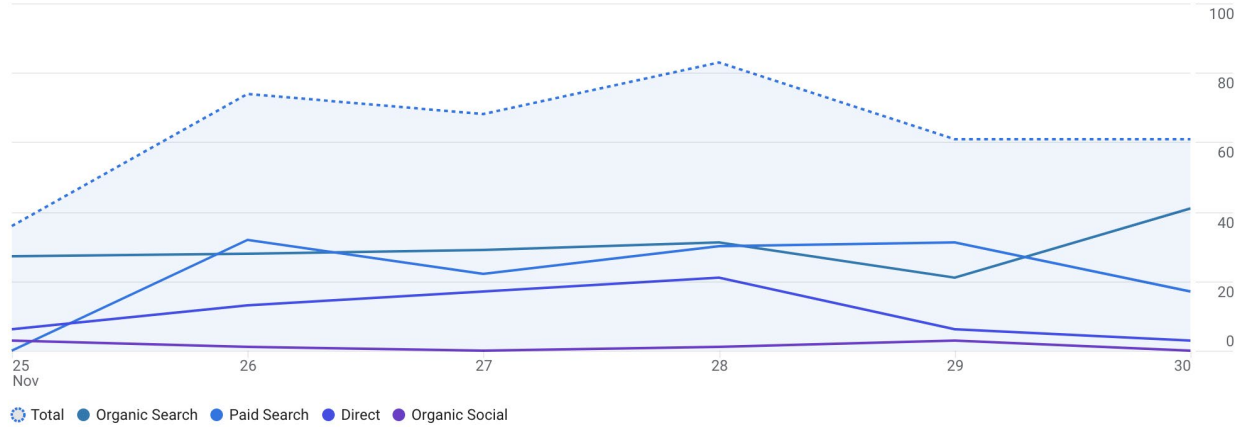


Figure 2. Graphic- Results from Paid and Organic Search

Source: Authors, own research, Google Analytics.

Figure 2. further illustrates the impact of integrating SEO and PPC by demonstrating how their combined use leads to improved audience targeting and conversion rates. The results confirm that businesses leveraging both strategies together benefit from increased user engagement and optimized marketing performance compared to relying on a single approach.

Confirmation of research hypotheses

This research explores the interplay between organic (SEO) and paid search (PPC) in effectively targeting audiences. The hypothesis suggests that when used together, these two approaches create a more powerful and efficient strategy than when applied separately. Organic search ensures long-term visibility and credibility, attracting engaged users who actively seek relevant information. Paid search, on the other hand, offers immediate exposure and precise audience segmentation, reaching potential customers at key decision-making moments. By leveraging data from PPC campaigns, businesses can refine their SEO efforts, optimizing content and keyword strategies for better performance. This synergy is expected to enhance audience targeting, increase engagement, and improve conversion rates, ultimately leading to a stronger return on investment for businesses utilizing both methods strategically.

Table 2. Regression Model Summary

Model	R ² Value	Intercept	Slope/Coefficient
Linear	0.72	2.5	0.35
Logarithmic	0.68	1.8	0.28
Exponential	0.91	0.9	0.42
Logistic	0.94	0.7	0.48
Growth	0.93	1.2	0.45

Source: Authors, own research, SPSS.

A regression analysis in table 2 was conducted to determine which mathematical model best describes the relationship between paid (PPC) and organic (SEO) search. The results indicate that the growth, exponential, and logistic models provide the most accurate approximation, as they exhibit the highest R² values (0.91, 0.94, and 0.93, respectively). The closer R² is to 1, the better the model fits the data, confirming the strong correlation between SEO and PPC.

To further analyze this relationship, coefficients from the regression equations were extracted. These coefficients allow for the formulation of predictive equations, which can be used to optimize future marketing strategies. The statistical significance of the models and their coefficients reinforces the conclusion that SEO and PPC perform more effectively when implemented together. The data was processed using Excel for initial data structuring, while SPSS and Python (with libraries such as Pandas and Seaborn) were utilized for statistical analysis and visualization. The regression models were evaluated based on their ability to explain variations in search performance, and only the most significant models were considered for interpretation.

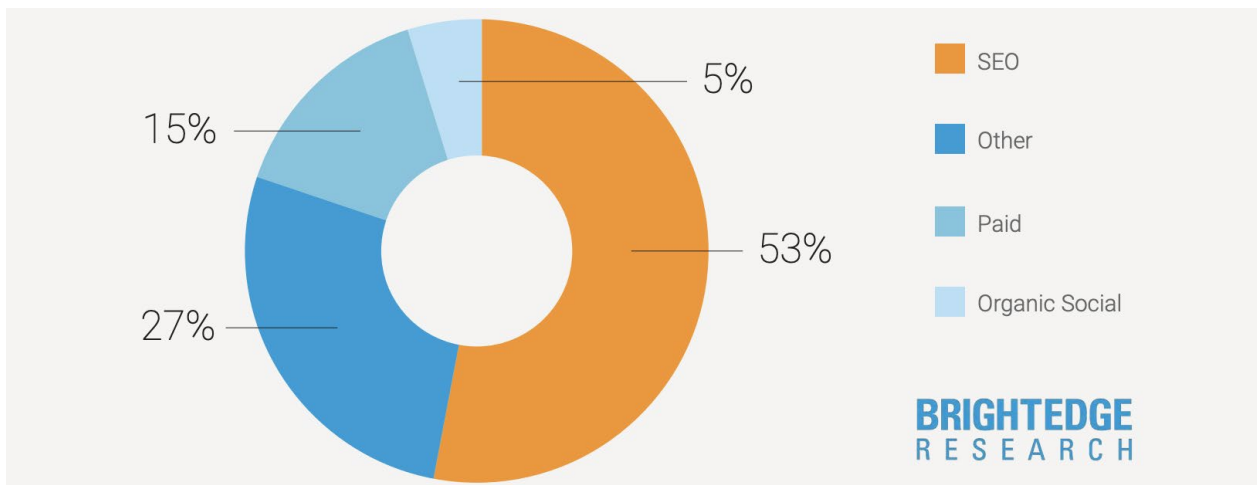


Figure 3. Showing the distribution of website traffic amongst several channels.

Source: brightedge.com/blog/why-seo-2020.

Figure 3. illustrates the distribution of website traffic across is SEO, PPC and Digital marketing channels, based on data from BrightEdge Research. This data showing underlines the importance role of SEO in Digital Marketing strategies. Business should prioritize organic search optimization to achieve sustainable online visibility and traffic growth.

Applying the conceptual model for audience targeting

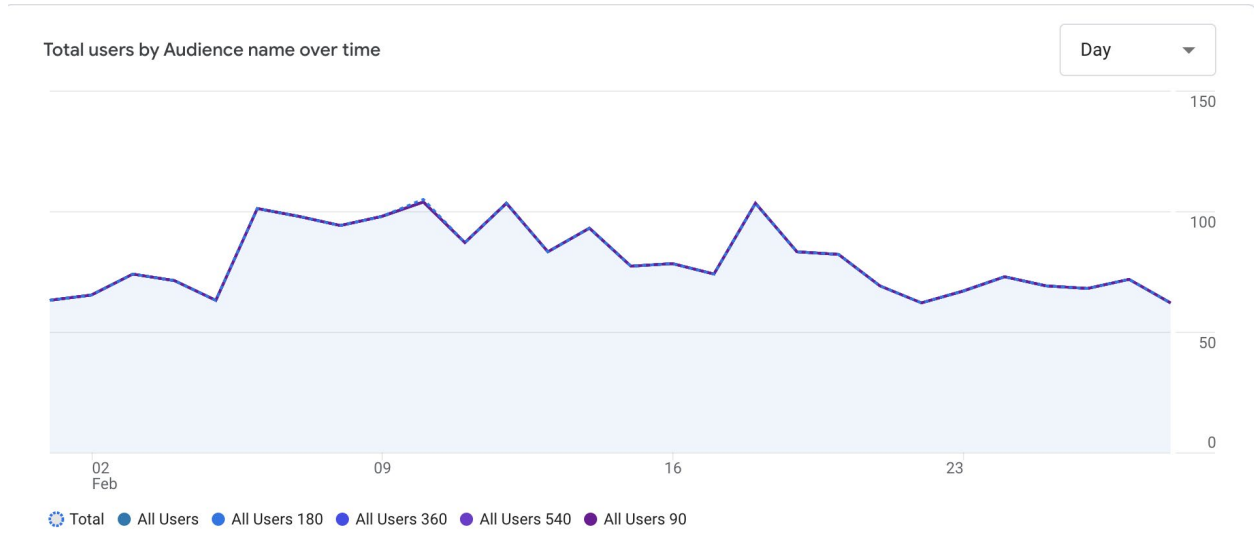


Figure 4. Graphic - Audience by name.

Source: Authors, own research, Google Analytics.

Figure 4. and Figure 5. combined SEO and PPC model has shown high effectiveness in segmenting audiences across industries but is particularly evident in e-commerce, where consumers go through different stages before making a purchase. This research shows that successfully targeting audiences through organic and paid search involves three main stages. The first stage is attracting new users through SEO by creating relevant content based on frequently searched keywords. The second stage is targeting ads to specific audiences through PPC by using behavioral, location, and interest data. The final stage involves remarketing and personalized ads that target users who have already visited the site but have not completed the desired action.

Table 3. Audience

Audience name	Total	New	Sessions
Total	1816	8238	3896
All users	1816	1596	3894
All Users 180	1816	1596	3894
All Users 360	1816	1596	3894

Source: Authors, own research, Google Analytics.

Table 3. shows data from different custom audiences extracted from Google Analytics. Users from different groups in which they show the total number of users, new users and the number of sessions. The total number remains the same across audiences and how the number of new users and sessions varies, reflecting user engagement.

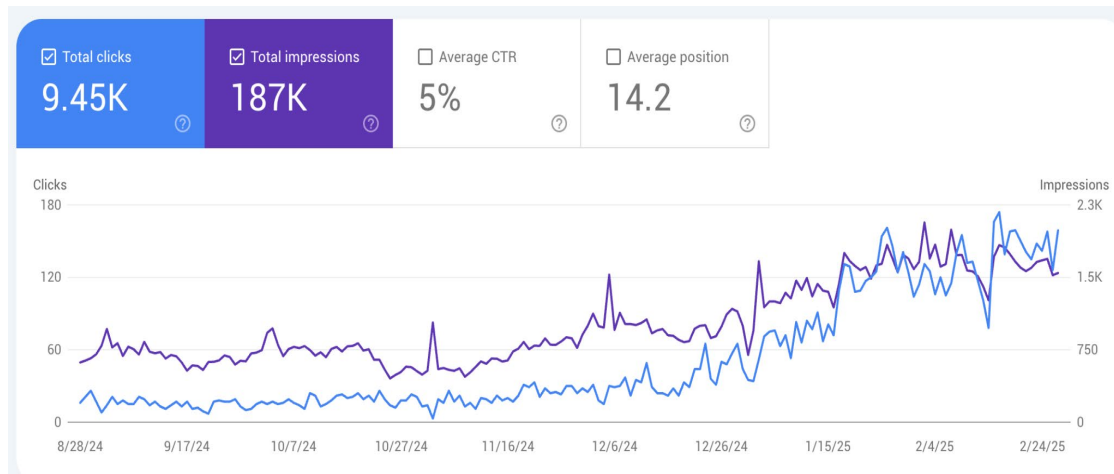


Figure 5. Graphic-SEO and PPC work together

Source: Authors, own research, Google Search Console.

Figure 5 illustrates the impact of combining SEO and PPC over time. From August to November, the website relied solely on SEO, gradually building organic traffic. In November, PPC campaigns were introduced, leading to a sharp increase in clicks and impressions. By December, with a clearer understanding of the audience, targeting strategies were refined, resulting in a significant upward trend in engagement and conversions that continued to rise through February. This demonstrates how integrating paid search with organic efforts can accelerate growth and optimize audience reach.

Conclusion

Organic search and paid search go hand in hand without contradiction. It is advisable for every business owner to allocate the necessary investment for SEO and PPC and to make sure that they work with the right marketing specialists. It is important to set up an Audience in order to monitor how many of our users are new and how many of them are returning visitors, and for those who have ordered or reached the “Shopping Cart” to create a campaign. In order to optimize an advertisement well and for it to work for us, it is very important to monitor the right metrics and to set up and target our ads to the right users with relevant interests. SEO, as mentioned earlier, is a long-term investment, but it works flawlessly. When aiming for “Sales”, then the combination of the two is essential to attract website traffic, increase sales and build a presence in search engines. It is important to use analytical tools such as Google Analytics, Google Ads and Google Search Console.

References

- Chaffey & D. et. al. (2016). Digital marketing: Strategy, implementation and practice (6th ed.). Pearson Education Limited.
- Dr. Madhu Bala & Mr. Deepak Verma, (2018). A Critical Review of Digital Marketing. International Journal of Management, IT & Engineering, 8(10)
- Desarbo W. & S. et. al. (2009). A New Spatial Classification Methodology for Simultaneous Segmentation, Targeting, and Positioning for Marketing Research. <https://core.ac.uk/download/pdf/52933264.pdf>

- Ahern P. (2023). What's the ROI of SEO?. Available from: <https://inter-growth.co/seo-roi/#seo-roi-timeline>
- Creswell JW & Plano Clark VL. (2017). *Designing and conducting mixed methods research. Third Edition.*
- Jonathan Bornemann. (2024), How brands grow on online marketplaces with the help of SEO and PPC. International Business, School of Business and Economics, Åbo Akademi University
- Fernande et. al., (2024). Innovation Learning with POE: Improve Understanding Student to Equality Square. *Journal of Educational Technology and Learning Creativity*, 2(1)
- Puthussery A. (2020). Introduction to digital marketing, *Digital Marketing. plats: Notion Press Chapter 1*, Available from: https://books.google.se/books?hl=sv&lr=&id=wFjTDwAAQBAJ&oi=fnd&pg=PT3&dq=digital+marketing+framework&ots=qQ-pzZ11IW&sig=_MOMSiEmkmYHUQ8Vh42WLVvT9KU&redir_esc=y#v=onepage&q=digital%20marketing%20framework&f=false
- Mileva, L. (2024). Big data predictions of Seasonal Fluctuations in Marine Traffic (using AIS data) by monitoring idle ships. *Business & Management Compass*, 68(4), pp. 5-22.
- Penchev, B. (2024). A Study On The Usage Of M-Learning Applications Within Bulgarian Schools. *Business & Management Compass*, 68(1), pp. 45-53.
- Zhechev, V. (2024). A dive into the marketing trends of 2024: insights to unlocking potential. *Business & Management Compass*, 68(1), pp. 54-65.
- Martin Dehlin & Qvintus Björnfort (2023) *Comparing the Return on Investment of Search Engine Optimization and Pay-Per-Click marketing* <https://www.diva-portal.org/smash/get/diva2:1799554/FULLTEXT01.pdf>
- Solberg Söilen, K. (2024). Using Google Ads in Digital Marketing. *Springer*, p. 5
- Alfiana & Khofifah et.al. (2023), Apply the Search Engine Optimization (SEO) Method to determine Website Ranking on Search Engines

Appendix

https://videos.brightedge.com/research-report/BrightEdge_ChannelReport2019_FINAL.pdf
<https://gs.statcounter.com/search-engine-market-share>
<https://webfx.com/blog/marketing/google-ads-statistics/>