



OPTIMISATION OF SOCIAL MEDIA CAMPAIGNS: Application of CRO in Digital Advertising

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ABSTRACT

This study analyses the application of Conversion Rate Optimization (CRO) techniques in social media advertising campaigns, exploring how visual alignment with competitor brands influences user interaction. Through a case study in the footwear sector, Meta Ads were evaluated, and predominant visual patterns were identified. Findings suggest that consistency with industry trends can reduce conversion friction, optimising advertising effectiveness. This approach reinforces the need to integrate CRO strategies from the user acquisition stage, improving user experience and increasing commercial performance.

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1. Introduction

In the current digital ecosystem, we find that Conversion Rate Optimisation (CRO) strategies have traditionally been applied to user experience on websites, aiming to enhance navigation and maximise the proportion of visitors who complete a desired action, such as a purchase or registration (Chaffey & Smith, 2013, p. 284; Kaushik, 2009). However, in a highly competitive environment, we observe that user conversion cannot rely solely on changes implemented on the website but must be optimised from the initial stages of the acquisition funnel, such as in social media advertising campaigns.

Despite the increasing integration of web analytics with User Experience (UX) techniques (Hay, 2017), we note that the literature on CRO has predominantly focused on optimising user experience within the website (Simioni, 2019; Srivastava & Manohar, 2020). In contrast, this study adopts an exploratory approach to analyse how variations in visual elements, starting from advertising campaigns, might influence user interaction before they reach the website. From a methodological perspective, this approach seeks to broaden the understanding of how visual factors could impact conversion on social media, drawing on prior studies in design optimisation and digital branding (Tayar, 2018).

The purpose of this research is to examine an initial exploration of the effectiveness of certain CRO strategies applied to social media acquisition campaigns, enabling us to assess their impact on user experience through digital analytics. By analysing interactions with different advertising creatives, we aim to identify whether patterns of visual preference exist and their potential relationship with user engagement in digital advertising.

Ultimately, this work contributes to multidisciplinary research on digital communication by exploring the potential of CRO beyond the website, seeking to extend its application to acquisition and testing strategies on social media platforms. In doing so, we investigate how to generate knowledge that may be valuable for both academic research and professional practice in the field of online marketing.

1.1. Conversion Optimisation from Digital Acquisition

In the current competitive environment, we observe that CRO has become a key element in enhancing the performance of digital marketing strategies. Traditionally, the literature on CRO has focused on user experience within websites, addressing aspects such as navigation, usability, and page structure (Simioni, 2019; Srivastava & Manohar, 2020). However, conversion is not a phenomenon exclusive to the web environment but begins the moment a user interacts with a brand in the digital ecosystem, such as on social media (Yang et al., 2016).

Digital analytics, as noted by Hancock (2023), is fundamental for making informed and strategic decisions in a context of digital transformation. Its application should not be limited solely to website optimisation but should encompass the entire user acquisition process, including social media advertising and other digital channels (Nakatani & Chuang, 2011). As Welling and White (2006) indicate, analytics has the potential to define the purpose and overall objectives of a digital communication strategy, enabling us to ensure that each user touchpoint is aligned with the expected outcomes.

The effectiveness of CRO depends on both endogenous factors, such as advertising creatives and segmentation strategies, and exogenous factors, such as the behaviour of the target audience and market evolution (Tayar, 2018). Within this framework, we deduce that the analysis of quantitative and qualitative data plays a crucial role in understanding the impact of visual elements on conversion. Gómez-Zorrilla and De La Espada (2020) underscore the importance of monitoring key metrics, such as Click-Through Rate (CTR) in advertisements, the progression of leads, and the distinction between new and returning users, to identify behavioural patterns and optimisation opportunities.

In this regard, controlled experiments, such as A/B testing, enable us to evaluate the effectiveness of different visual approaches in digital advertising and their impact on user acquisition (Kohavi & Longbotham, 2015; Siroker & Koomen, 2015). While these tests have been widely used in website and application optimisation, we find that their application in social media advertising campaigns remains an evolving field of study. According to Rennie et al. (2020), purchase intent in digital environments is built through multiple touchpoints, reinforcing the need to assess how visual communication within advertisements can influence consumer decisions.

When applying CRO techniques to acquisition campaigns, we must consider segmentation and user behaviour across different contexts (Siqueira & de Paula, 2018). Factors such as the day of the week, seasonal events, or demographic variations can significantly affect the performance of our digital strategy and, consequently, the campaign's conversion rate (Tayar, 2019). As Brinck et al. (2001) and Shneiderman et al. (1998) have noted, combining usability testing with data analysis allows us to validate the design of acquisition strategies based on the real user experience.

Studies thus suggest that we should not approach conversion optimisation solely through website design and experience but must integrate effective strategies from the traffic acquisition phase to maximise user interaction from the first point of contact with the brand.

1.2. The Impact of Visual Elements in Digital Conversion

Several studies indicate that visual perception plays a key role in consumer decision-making and conversion optimisation. Various researchers have demonstrated that psychological effects, such as the Halo Effect (Lachman & Bass, 1985; Thorndike, 1920) and Priming (Bargh et al., 1996), can significantly influence how users interact with a brand and make purchasing decisions. Applied to digital advertising, these principles suggest that the initial impressions generated by an advertisement can impact not only brand perception but also the user's predisposition to convert.

In the context of digital acquisition, the Halo Effect can be observed in strategies such as the use of celebrities, high-quality images, or aspirational visual elements in advertisements (Lingaard et al., 2011). These authors further note that the first impression of a design or visual content is formed in as little as 50 milliseconds, and this initial perception can determine the user's trust and interest in the brand. However, misuse of these resources can generate negative associations that undermine the company's credibility (Lingaard et al., 2011).

As evidenced in other studies, consumers respond more favourably to graphical elements that reinforce familiar and predictable visual associations (Song et al., 2023), underscoring the importance of aesthetic and narrative coherence in acquisition strategies. From a conversion optimisation perspective, these principles can be combined with other factors such as cognitive fluency, familiarity, and prototypicality (Dean, 2023), which influence brand perception and the user's predisposition to interact. It has been shown that consumers tend to prefer visual elements that align with their prior expectations and are easily processable, reinforcing the need to adapt advertising creatives to the dominant aesthetic standards in each sector (Nordhoff et al., 2018).

In the realm of digital commerce, branding and visual design are critical factors in building trust and improving conversion (Hancock, 2023). Brand recognition (Escalas & Bettman, 2005) and the development of a coherent visual identity across various user touchpoints contribute to consolidating brand image and encouraging users to complete desired actions. As Essig (2022) points out, brand strategy and marketing strategy must be aligned across all digital channels to strengthen consumer loyalty and maximise the impact of advertising campaigns.

Finally, research has highlighted the importance of visual merchandising in the digital environment (Eroglu et al., 2001; Harris, 1998). Prior studies have also sought to demonstrate how the arrangement of visual elements in advertisements and e-commerce platforms influences consumer perception and purchasing behaviour (Then & DeLong, 1999; Kim & Lennon, 2000). In the fashion sector, in particular, the effective integration of product images and visual storytelling can reduce perceived risk and increase purchase intent (Soloaga, 2002; Zhang et al., 2010).

These findings reinforce the importance of applying visual optimisation techniques not only in web environments but also in acquisition campaigns to ensure that the user's first interaction with the brand is impactful and aligned with conversion objectives.

1.3. Research Objectives

While we observe that most studies on CRO have focused on improving performance within websites, this study aims to evaluate whether quantitative and qualitative techniques used in web environments can be effectively applied to the optimisation of social media advertisements. Accordingly, the study proposes the following specific objectives:

S01: To determine whether CRO techniques, traditionally applied to web optimisation, can be adapted to the analysis and improvement of social media advertising campaigns.

S02: To conduct an exploratory empirical study that analyses the effectiveness of applying these techniques to digital acquisition, using a case study based on quantitative and qualitative data.

These objectives will enable us to establish a methodological foundation for assessing the relevance of transferring digital optimisation strategies to the acquisition phase on social media platforms.

2. Design and Method

2.1. Subject of the Study and Type of Research

Unlike traditional CRO studies, which focus on enhancing user experience within websites, this research adopts an exploratory perspective to determine whether these techniques can be implemented in the initial stages of the conversion funnel, particularly within online advertising campaigns (Nakatani & Chuang, 2011; Welling & White, 2006).

The research follows an exploratory and empirical approach, based on a case study, combining quantitative and qualitative methodologies to evaluate the effectiveness of various visual strategies in digital conversion (Belanche et al., 2019; Orazi & Johnston, 2020). In this context, we propose two fundamental hypotheses:

H1: CRO techniques used in web optimisation can be applied to social media advertising campaigns, leading to improvements in user acquisition.

H2: The implementation of CRO-based strategies in digital campaigns can contribute to increased initial engagement with advertisements (clicks and interactions) on social media, and thus prior to the user reaching the website.

Field experiments on Facebook have proven more reliable than laboratory experiments for assessing advertising effectiveness due to their greater external validity (Orazi & Johnston, 2020). Furthermore, audience segmentation in A/B testing can enhance the precision of measurements, minimising confounding factors in the results (Eckles et al., 2018, cited in Orazi & Johnston, 2020).

Table 1. Comparison of methodologies in web CRO and digital advertising

Aspect	CRO on websites	CRO in digital advertising	Source(s)
Objective	Optimise the user experience on the web to increase conversions.	Improve ad performance to increase traffic acquisition.	Nakatani & Chuang, 2011; Welling & White, 2006
Key techniques	A/B testing, heat maps, conversion funnel analysis.	A/B testing, advanced segmentation, creative optimisation.	Orazi & Johnston, 2020; Faisal et al., 2024
Key metrics	Conversion rate, time on page, number of clicks on CTAs.	CTR, CPC, interaction rate, attributed conversions.	Gordon et al., 2019
Limitations	Difficult to scale to multiple audiences without prior personalisation.	Ad saturation can reduce effectiveness.	Belanche et al., 2019

Source: Own elaboration, 2025

2.2. Scope of Study and Sample Selection

The case study will be conducted in the fashion sector, specifically within a Spanish footwear retail business. For reasons of confidentiality and to protect recent strategic information, the identity of the brand will not be disclosed, thereby ensuring the neutrality of the analysis and preventing potential competitive advantages arising from its publication. We will work with data obtained in a real-time digital environment during the January and February 2025 sales promotion period, using data from the brand's advertising and web analytics tools.

Given the empirical nature of the study, the sample cannot be defined a priori with a fixed number of participants; rather, it will be naturally configured based on the traffic of users interacting with the advertisements during the research period. We will employ non-probabilistic sampling based on observational data, considering metrics such as reach, clicks, CTR, and conversion rate, obtained directly from advertising and analytics platforms, such as Meta Business Manager and Google Analytics (Pakkala et al., 2012).

Due to privacy restrictions and data protection regulations, we will not have access to users' personal information or the company's internal sales data. The research is limited to aggregated metrics provided by the platforms used, thereby ensuring compliance with ethical principles in the collection and analysis of information.

2.3. Research Variables and Techniques

Our study is based on the analysis of key variables to evaluate the applicability of CRO methodologies in the context of digital acquisition through social media advertisements. As indicated in Table 1, the primary variables to be analysed include interaction with advertisements, comparison of the performance of different advertising creatives, and the evolution of traffic derived from the campaign based on implemented visual changes. These variables enable us to establish relationships between the visual elements of social media campaigns and their impact on user engagement, facilitating the identification of patterns that optimise conversion at this stage of the acquisition funnel.

The methodological process will be structured sequentially, following the logic of a CRO audit, where each phase will generate hypotheses that are validated before proceeding to the next stage. This approach aligns with previous studies demonstrating that CRO should extend beyond web optimisation and be applied to social media advertising campaigns (Nakatani & Chuang, 2011; Welling & White, 2006).

Table 2. Approach to the stages of the methodological process (CRO audit)

Phase	Description	Source(s)
Initial data analysis (quantitative)	Evaluation of user behaviour on ads and website using digital analytics tools (GA4 and Meta Ads Manager).	Pakkala et al., 2012; Tayar, 2019
Preliminary (qualitative) analysis	Qualitative benchmarking of visual trends in the industry using Meta Ads Library and analysis of direct and aspirational competitor ads.	Hardwick, 2019; Yang et al., 2016
A/B test design	Definition of hypotheses and selection of creatives to compare. Justification of A/B testing as a valid experimental method to evaluate ad performance.	Faisal et al., 2024; Orazi & Johnston, 2020
Campaign execution	Implementation of Meta Ads with optimised targeting and real-time analysis of key metrics (CTR, CPC, reach).	Faisal et al., 2023; Gordon et al., 2019
Performance analysis	Evaluation of the impact of creatives on user engagement, comparing data from Meta Ads Manager and Google Analytics.	Pakkala et al., 2012; Singh et al., 2022
Limitations and setting	Restrictions on the duration of the experiment per sales campaign. Adaptation of strategies based on findings.	Gordon et al., 2019; Hermayanto, 2023.

Source: Own elaboration, 2025

For data collection and analysis, we will employ quantitative and qualitative techniques, combining tools for measuring advertising impact with methodologies specific to CRO. Firstly, A/B tests were conducted on social media, which have been widely used in digital advertising and have proven key to conversion optimisation (Faisal et al., 2023).

As part of the methodology, we will initially use the Business Model Canvas (Osterwalder & Pigneur, 2010) to extract key business factors and identify relevant strategic elements. Subsequently, we will

perform an SEO benchmarking or competitive SEO analysis using the Ahrefs tool to evaluate the company's performance compared to its direct competitors and identify opportunities for improvement (Hardwick, 2019). This analysis enables us to contextualise the client's current digital positioning at the time of the experiment and inform decisions for optimising traffic acquisition campaigns.

Next, we will conduct a quantitative analysis using Google Analytics (Tayar, 2019, p. 192) to collect data on user behaviour on the company's website during the campaign period, comparing it with previous weeks or periods. We selected this tool specifically because it is installed and properly implemented to capture the client's web traffic and conversions. Prior to analysis, we verified that the GA4 version was optimised and comprehensively collecting data. Web analytics will provide detailed information on key metrics, which we will analyse specifically following the steps and analytical points outlined by Kaushik (2009, pp. 57–89) and Tayar (2019, pp. 192–198). At this stage, we will begin to identify initial inefficiencies in user experience and campaign conversion.

In parallel, we will conduct a benchmarking study of advertising creatives using Meta's Ad Library, a tool that facilitates real-time analysis of competitors' active campaigns, including both aspirational brands and direct competitors. This type of social media benchmarking is a fundamental practice in digital optimisation, as it allows us to establish reference points with competitors and inform strategies for improving visual brand communication (Hardwick, 2019). Moreover, the literature has demonstrated that analysing advertising campaigns on digital platforms enables the extraction of trends that can enhance user engagement and response, facilitating data-driven decision-making (Yang et al., 2016).

This visual analysis supports the formulation of hypotheses prior to A/B testing, in which current advertisements will be compared with new creatives designed to optimise performance. Subsequently, we will perform a detailed analysis of user behaviour data from advertisements and the website, extracted from platforms such as Meta Ads Manager and Google Analytics, to identify user behaviour patterns (Pakkala et al., 2012). Additionally, we will record baseline metrics prior to the experiment, such as CTR and Cost Per Click (CPC), as these indicators have proven essential for measuring advertising effectiveness in split-testing experiments on Facebook (Orazi & Johnston, 2020).

A/B testing in Meta Ads (previously known as Facebook Split Testing – FBST) is a widely used tool in digital advertising, enabling controlled experiments in a realistic, large-scale environment, ensuring random stimulus assignment and avoiding algorithmic optimisation biases (Orazi & Johnston, 2020). Field experiments in Facebook/Meta Ads have been validated in the literature as research tools with greater external validity compared to laboratory experiments, as they overcome issues of artificiality and managerial relevance (Orazi & Johnston, 2020). Furthermore, the use of A/B testing in CRO and digital advertising contexts provides critical insights into conversion optimisation, enabling progressive adjustments based on the performance of advertising creatives (Faisal et al., 2023). To mitigate biases, the literature suggests using the "reach" objective in A/B test campaigns to ensure the sample obtained is as representative as possible (Orazi & Johnston, 2020). In other words, employing A/B testing methodology in Meta Ads not only allows us to evaluate advertisement performance in dynamic advertising environments but also establishes a replicable methodological framework for future research in digital conversion optimisation and advanced audience segmentation (Hermayanto, 2023).

3. Fieldwork and Data Analysis

3.1. Data Collection and Study Limitations

Data collection for the study was conducted over a defined research period, from 16 January to 1 February 2025, using digital advertising and analytics tools. The methodological procedure was structured based on the sequential phases outlined in Table 2, following the approach of a CRO audit to ensure data validity and consistency in result interpretation (Clifton, 2012; Kaushik, 2009).

The client provided access to platforms such as Google Analytics 4 (GA4) and Meta Ads Manager, enabling the extraction of relevant real-time data for evaluating campaign performance. However, a key limitation was that, while conversion data were accessible, economic or sales metrics will not be disclosed to protect the client's commercial strategy from competitors. This restriction aligns with other studies where conversion metrics analysis has been conducted without revealing revenue data due to strategic or privacy regulations (Tayar, 2018).

Another significant limitation was related to the allocated budget. As the advertising investment was pre-planned for ongoing sales campaigns, a standard A/B test within Meta Ads was not feasible. Instead, an alternative strategy was adopted, where existing campaigns remained unchanged with Advantage+ segmentation, while experimental campaigns were developed in parallel with a similar, independent budget. This approach ensured no impact on the optimisation of the client's active campaigns and guaranteed that the data obtained were fully representative in both scenarios.

Unlike a traditional A/B test, where the investment is split 50% between the two versions, in this case, each campaign set received a full and separate investment, which proved more relevant for our study as it ensured that the captured metrics reflected the true performance of each strategy without interference (Orazi & Johnston, 2020). This approach has been used in previous digital advertising studies to minimise the impact of algorithmic segmentation on results (Gordon et al., 2019).

Additionally, another limitation of the study was the lack of access to advanced post-click conversion metrics, which prevented a detailed analysis of user behaviour after interacting with the advertisements. While the initial impact of creatives could be measured in terms of CTR and CPC, tracking navigation within the website was limited to the data available in GA4 (Clifton, 2012).

Regarding the effectiveness of the experimental campaigns, although a positive impact on interactions and clicks was confirmed, it was not possible to evaluate the persistence of the effect over time, as the experiment's duration was restricted to the sales period. This methodological constraint is common in CRO studies in commercial settings, where promotional periods can influence data stability (Gudigantala et al., 2016).

Despite these limitations, the adopted approach enabled us to draw exploratory conclusions about the feasibility of applying conversion optimisation methodologies to digital acquisition campaigns on social media platforms.

3.2. Phases of Data Analysis

We adapted the data analysis process to the real-world implementation conditions of the study, adhering to the initially proposed sequential methodological structure while incorporating adjustments due to limitations encountered during campaign execution.

Initially, the methodology envisioned conducting A/B tests within Meta Ads to evaluate the performance of different advertising creatives. However, due to budgetary constraints and the need to avoid interfering with ongoing sales campaigns, an alternative experimental comparison strategy was adopted. Instead of splitting the budget between two variants within a single A/B test, we implemented parallel and independent campaigns, replicating as closely as possible the segmentation, objective type—conversion campaign—and investment of the original campaigns. This approach, though different from the initial methodology, has been employed in other studies as a valid alternative for assessing advertising effectiveness without impacting the performance of active campaigns (Gordon et al., 2019; Orazi & Johnston, 2020).

For data collection, we used Meta Business Ads Manager and Google Analytics, enabling the measurement of key metrics such as reach, CTR, CPC, and impressions in real time. However, due to access restrictions, economic and direct sales data could not be analysed in depth, so conversion evaluation was based on anonymised data from the advertising platform without access to detailed transactional information. Such methodological limitations are common in digital advertising studies and have been documented in prior research on web analytics and advertising optimisation (Clifton, 2012; Tayar, 2018;).

Despite these constraints, the analysis of metrics allowed us to identify patterns in user interaction with the advertisements, revealing significant differences in the performance of optimised creatives compared to the originals.

Given that the experiment's duration was limited to a few days during the sales period, it was not possible to make iterative adjustments to the advertising strategy or analyse the long-term sustainability of the observed effects. Nevertheless, the study's structure and real-time metric collection provide a solid foundation for future research seeking to explore the applicability of CRO in the initial stages of the digital conversion funnel (Laja, 2022).

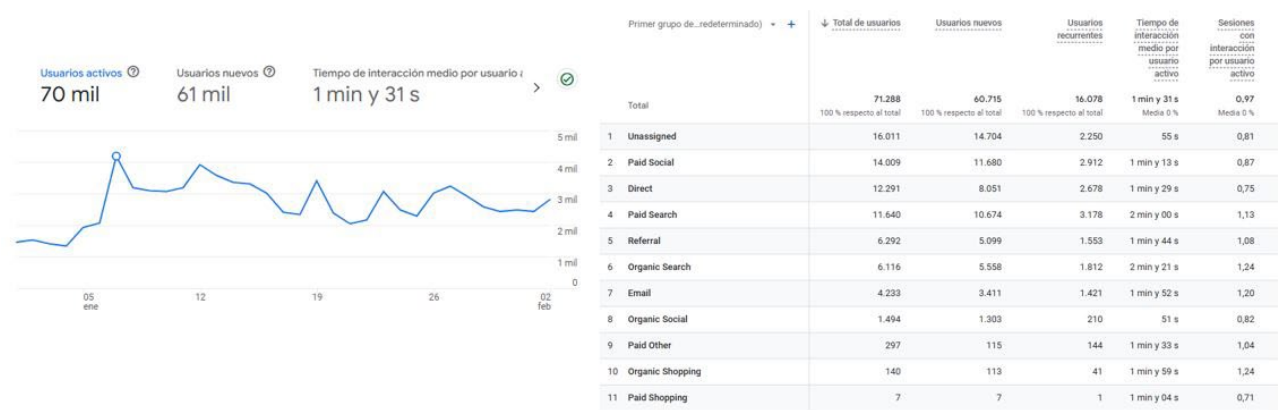
4. Results

4.1. Initial Data Analysis Phase (Quantitative)

The quantitative analysis prior to the A/B testing was conducted using data extracted from Google Analytics 4 (GA4) and Meta Ads Manager, with the aim of evaluating the impact of the sales campaigns on web traffic and advertisement interaction.

The data obtained from GA4 (Figure 1) reflect a significant increase in website visits since the start of the sales period, evidenced by the rise in active users and the average session duration.

Figure 1. Increase in paid traffic sources and active users



Source(s): Own elaboration based on data extracted from GA4, 2025.

Figure 1 illustrates the evolution of web traffic, highlighting a peak in visits coinciding with the start of the promotions. Furthermore, the analysis of traffic sources reveals that paid campaigns on Meta Ads were one of the primary sources of visits, justifying the choice of this platform for the A/B testing experiment.

Figure 2. Most viewed product categories and additions to the cart prior to the test.

Categoría del artículo	Artículos vistos	Artículos añadidos al carrito
Total	52.102	1.783
	100 % respecto al total	100 % respecto al total
1 Botas	27.455	798
2 Botines	16.880	749
3 Bailarinas	3.667	120
4 Mocasines	1.836	64
5 Sandalias tacón	1.056	18
6 Sandalias planas	959	25
7 Cangrejas	129	1
8 Alpargatas	48	1
9 Sneakers	40	0
10 tote bags	32	7

Source(s): Own elaboration based on data extracted from GA4, 2025.

Figure 2 shows that the products most viewed and added to the shopping basket during the period analysed were boots and ankle boots, confirming the relevance of these products within the client's commercial strategy, which is why these are the products we will focus on in the experiment.

Figure 3. Categories of products most viewed and added to the cart prior to the test.

Anuncio	Impresiones	CPM (coste por 1000...)	Clics en el enlace	CPC (Coste por clic en el enlace)	CTR (porcentaje de clics en el...)
 2...	44 613	3,98 €	803	0,22 €	1,80%
 influs_2as_j...	35 315	4,06 €	752	0,19 €	2,13%
 rebajas_...	31 311	3,54 €	311	0,36 €	0,99%
 2asrebajas_...	29 943	3,06 €	561	0,16 €	1,87%
 2asrebajas_...	24 231	4,16 €	327	0,31 €	1,35%
 influs_...	24 120	6,37 €	516	0,30 €	2,14%
 2asrebajas_...	23 198	4,41 €	464	0,22 €	2,00%
 2asrebajas_r...	21 684	5,32 €	620	0,19 €	2,86%
 influs_...	19 473	5,25 €	209	0,49 €	1,07%
 influs_...	14 522	5,97 €	363	0,24 €	2,50%
Resultados de 187 anuncios	377 488 Total	4,67 € Por 1000 impresiones	6759 Total	0,26 € Por acción	1,79% Por impresiones

Source(s): Own elaboration based on data extracted from GA4, 2025.

In the analysis of Meta Ads (Figure 3), a detailed evaluation was conducted of campaign types, formats, and active advertisements prior to launching the test, considering key metrics such as reach, impressions, CTR, CPC, and conversions. The figure presents the results of 187 active advertisements, indicating an average CTR of 1.79% and that CPC varied depending on the type of creative and segmentation. However, it is important to note that Meta Ads attribution is based on a 7-day window, so purchase data indicated an initial pattern, but their final accuracy would only be confirmed after this period.

4.2. Preliminary Analysis phase (Qualitative)

For the qualitative analysis, the predominant visual strategy of the brand was evaluated, and trends within the sector were identified, with the aim of determining common creative patterns that could influence the optimisation of the advertisements.

Table 3. Current predominant visual strategy in client's advertisements

Visual and creative element	Description
Use of influencers	Images in which a person uses the product, favouring the user's identification with the brand.
Floating product image with discounted price.	Photographs of the product floating in front of a background with a model. The floating product image highlights the discounted price.
Price before and after	Advertisements with a striking colour palette, especially red, reinforcing the urgency to buy.
Collages of several product references	Images with multiple products in the same ad, increasing the variety of options for the user.
Use of keywords in the image	Inclusion of terms such as "sales" and "up to 60% off" to emphasise the promotion.

Source: Own elaboration based on Meta Business Ads Manager, 2025.

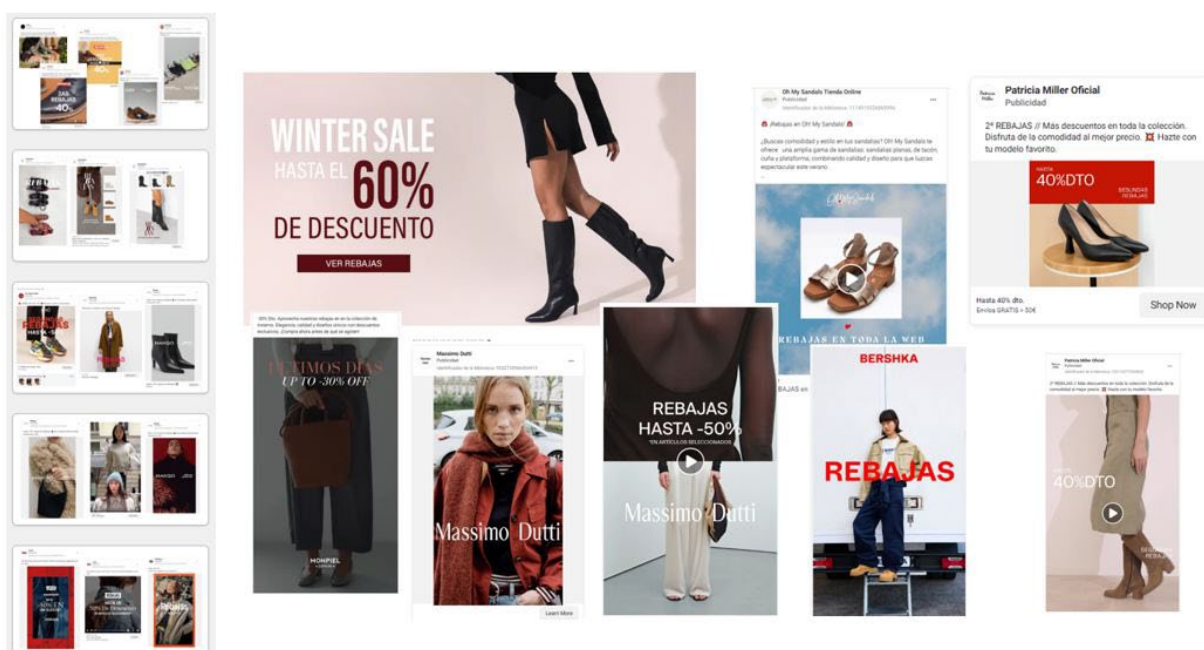
Firstly, the predominant visual strategy in the brand's current campaigns was established, with the most commonly used graphic and conceptual elements in the best-performing ads on Meta Ads being identified. Table 3 provides a synopsis of the key visual elements observed in the advertisements prior to the initiation of the experiment.

Subsequently, a benchmarking process was conducted, encompassing the analysis of prevailing visual trends among competitors, with a particular emphasis on the auditing of active campaigns on Meta Ads. To this end, a two-pronged approach was adopted in the selection of competitors, with the following two criteria being taken into account:

- 1) Actual competition: brands were identified through an analysis in Ahrefs as those that compete directly for SEO positioning in the products of the brand analysed.
- 2) Aspirational competition: brands suggested by the client as aesthetic and communicative references within their branding and advertising strategy.

In order to conduct this analysis, we made use of Meta's Ad Library, a tool that enables the viewing of the active campaigns of different advertisers. A comparative analysis of the predominant visual trends in the sector was conducted, for which screenshots of advertisements from the main competitors were collected (Figure 4).

Figure 4. Some of the creative in the fashion and footwear sector in January 2025 in Spain.



Source(s): Own elaboration based on data extracted from the Meta Ad Library, 2025.

This analysis enabled the identification of the most recurrent patterns in the advertising creatives of competing brands. This finding is based on information obtained from 22 advertisers and 60 different ad variations. This facilitated the identification of common graphic and narrative elements within the fashion and footwear industry. These visual patterns were then utilised as the foundation for the design of the A/B experiment.

4.3. Campaign Execution

In order to guarantee the validity of the test and circumvent any potential interference with current strategies, as requested by the client, the new campaign was established with the same characteristics as the control group regarding advertising formats, locations and conversion objectives, with the sole exception of the segmentation and creatives employed. A segmentation was established with the objective of targeting a remarketing audience, consisting of users who had interacted with the brand and visited the website within the last 180 days. This approach enabled the evaluation of the impact of the new creatives on an audience that had already been exposed to the brand.

The creatives proposed in this new campaign were the result of a thorough audit process, involving a review of previous campaigns, as well as an analysis of advertising benchmarking and website navigation in this particular sales context. The design of the four ad variants was informed by trends

identified in the industry and among competitors. The subsequent section (Table 4) will provide a detailed exposition of these trends.

Table 4. Visual trends identified in the competition and industry

Visual trend	Content description	Target
Vertical videos with split image	Advertisements are presented in <i>stories</i> or <i>reels</i> with the image divided into two sections: in one, a detailed shot of the product is shown highlighting the quality of the material (leather), and in the other, a model wearing the footwear with a seasonal outfit.	Highlight the quality and design of the product at a glance, increasing the perception of value.
Images or videos with a single product and highlighted texts.	Use of images or videos where only one product appears, accompanied by eye-catching texts with the word "Sale" or with the brand logo in large size.	Brand reinforcement and improved visual identification in the audience, ensuring that both the brand and the product are easily recognisable.
"Sale" or "Last days" texts in red.	Large red fonts are used to highlight promotional messages such as "Last days" or "Sale".	Generate urgency and a sense of scarcity in consumers, encouraging quick conversion.
Product images under dark transparency	Product images with a dark opaque layer to reduce contrast, turning them into a background where "Sale" text and brand logo are superimposed.	Making the promotional message easier to read, ensuring that the texts are legible without interference with the product image.

Source: Own elaboration based on Meta Ad Library, 2025.

4.4. Results Analysis

In order to evaluate the effectiveness of the different creative variations in comparison to the client's visual strategy, an analysis was conducted of the key metrics obtained from the experimental campaign against the control campaign. Despite the inability to present direct screenshots of the client's advertisements, the data obtained enables the extraction of significant trends concerning the impact of each type of creative (see Figure 5).

Figure 5. Results of the different creativities proposed for the test

Anuncio	Alcance	Visualizador	Frecuencia	Coste por resultado	Impresiones	CPM (coste por 1000...)	Clics en el enlace	CPC (Coste por clic en el enlace)	CTR (porcentaje de clics en el...)
 test_stories 3	4903	6206	1.24	— Por compra	6096	5.04 €	114	0.27 €	1.87%
 test_chiara - Copia	9187	12 927	1.39	9.90 € Por compra	12 801	3.87 €	219	0.23 €	1.71%
 test_influ_look	5634	6605	1.07	— Por compra	6001	4.54 €	72	0.38 €	1.20%
 test_fondo_oscuro - Copia	5375	7072	1.30	17.11 € Por compra	7002	4.89 €	103	0.33 €	1.47%
 test_manuela	1150	1327	1.15	7.57 € Por compra	1326	5.71 €	15	0.50 €	1.13%
 test_influ_detalle	—	—	—	— Por compra	—	—	—	—	—
Resultados de 6 anuncios	19 818 cuentas del Centro de ...	34 137 Total	1.68 Por cuenta del Centro ...	18.65 € Por compra	33 226 Total	4.49 € Por 1000 impresiones	523 Total	0.29 € Por acción	1.57% Por impresiones

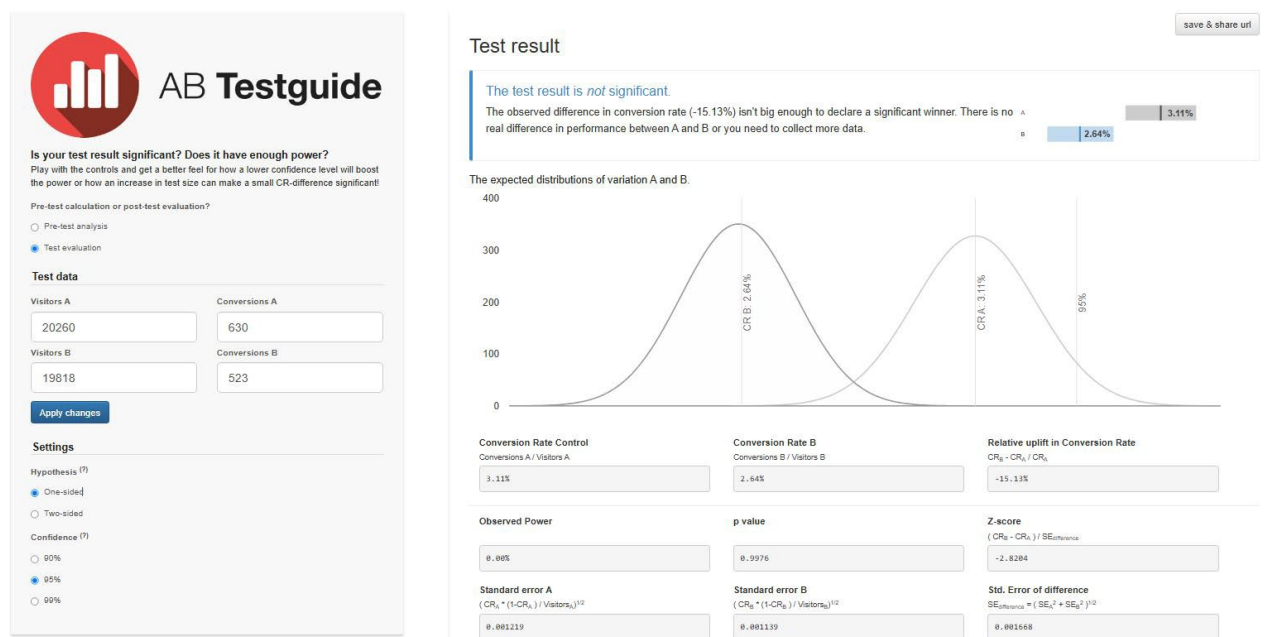
Source(s): Own elaboration based on data extracted from Meta Ads Business Manager, 2025.

Initial findings indicate that metrics pertaining to reach, clicks, and interactions with the advertisements suggest that variations incorporating split-screen videos and dark backgrounds with superimposed text generate conversions. Conversely, those with the product zoomed in to highlight its quality, as well as those that emphasised the sale message in red with large font, achieved the highest number of clicks and the most interaction with the advertisements.

In order to ascertain whether there was a significant difference in the performance of the creative variations in terms of the campaign as a whole, the AB Test Calculator tool (Figure 6) was utilised, which confirmed that, at this stage, the results have not reached statistical significance. The conversion rate for the control campaign was 3.11%, while the experimental campaign achieved 2.64%, reflecting a difference of -15.13%. However, the p-value of 0.9976 indicates that this difference is not statistically

significant, suggesting that the sample size is insufficient for reliable conclusions to be drawn, or that the experimental time is inadequate for any definitive conclusions to be reached.

Figure 6. Result when comparing the total results of both campaigns



Source(s): Own elaboration based on data extracted from Meta Ads Business Manager and AB Test Calculator, 2025.

4.5. Adjustments and Optimisation

Despite the absence of real-time modifications, strategic adjustments were implemented following the acquisition of initial results. In light of the experimental findings and digital analytics data, recommendations were formulated for the client to enhance the efficacy of their prevailing campaigns. Specifically, it was proposed that the most effective creatives should be incorporated into the existing Advantage+ campaigns, as these formats had been shown to generate a higher volume of clicks and interactions.

5. Conclusions and Discussion

The results of this study lend support to hypothesis H1, which posits that visual optimisation strategies can enhance the efficacy of social media campaigns. Through the implementation of diverse creative variations, it has been possible to identify patterns that suggest a relationship between the visual design of advertisements and user interaction. This finding is consistent with previous research on the impact of visual perception on the effectiveness of advertising (Escalas & Bettman, 2005; Singh et al., 2023).

In particular, it has been confirmed that creatives aligned with prevailing visual trends in the industry generate a higher volume of interactions, albeit with methodological caveats. The findings of this study imply that user preferences on social media may be influenced by previously established design patterns in the industry, thereby reinforcing the importance of benchmarking as a strategic tool in advertising campaigns.

Despite the favourable outcomes observed, statistical scrutiny of the experiment reveals that the discrepancy between the control and experimental campaigns did not attain adequate statistical significance. This finding suggests that while the data may indicate favourable trends, it is essential to extend the duration of the experiment or increase the sample size to derive more reliable conclusions.

This study makes a significant contribution to the extant literature by demonstrating that CRO should be integrated from the beginning of the user acquisition process, an approach that has been little explored until now.

For future research, we will seek to conduct tests with greater control over segmentation and longer campaign durations. We will also explore new qualitative methodologies that allow us to analyse the user experience for conversion increases. The integration of web browsing analysis with digital advertising experiments has the potential to provide a more comprehensive understanding of how visual optimisation strategies influence consumer behaviour, from the initial impact to the final conversion.

In conclusion, the present study provides relevant insights and partially validates the hypothesis that certain visual strategies can improve user acquisition. While further experimentation is required to consolidate these findings, the results obtained thus far provide a foundation for the optimisation of future campaigns and initiate new research directions at the intersection of CRO and social media advertising.

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