



NOVA

IMS

Information
Management
School

MEGI

Mestrado em Estatística e Gestão de Informação

Master Program in Statistics and Information Management

Personalization in Digital Advertising

Patrícia Ramos Pimentel

Dissertation report presented as partial requirement for
obtaining the Master's degree in Statistics and Information
Management

NOVA Information Management School
Instituto Superior de Estatística e Gestão de Informação
Universidade Nova de Lisboa



NOVA Information Management School
Instituto Superior de Estatística e Gestão de Informação
Universidade Nova de Lisboa

PERSONALIZATION IN DIGITAL ADVERTISING

by

Patrícia Ramos Pimentel

Dissertation report presented as partial requirement for obtaining the Master's degree in Information Management, with a specialization in Marketing Research and CRM

Advisor / Co Advisor: Professor Roberto Henriques

February 2022

ABSTRACT

This research studies the impact a well-planned digital advertisement campaign and user-friendly online experience can have on Brands awareness and sales. As the Digital landscape evolves, so has Online Advertisement and Data collection, making it possible for Advertisers to know more about who is navigating online, where they are, and how to approach them. With the gathering of online users' insights, brands can impact whom they want and how they want to, making their communication more relevant, therefore creating less noise and more conversation. This work aims at proving that these segmented and personalized campaigns lead to more engagement and sales than the ones that just target anybody with no defined criteria. It will also consider the opinions of online users regarding online advertisement and the fact that brands can use their navigating information to plan and implement digital campaigns. With this in mind, it would be possible to detect a relation between advertisement quality and user experience with the increase or decrease of Ad Blockers downloads, especially amongst Generation Z, that is the generation more comfortable with digital technology and will be the consumers of the future. By the end of the study we should be able to understand better the environment of actual digital advertisement and the way it can and should evolve in the future regarding all the insights we are able to collect from this research.

KEYWORDS

Advertisement; Digital; Personalization; Programmatic; Data

INDEX

1. Introduction	1
2. Literature review	6
2.1. Advertisement leading to the rise of Ad Blockers.....	7
2.2. Use of Data to Segment Advertisement.....	8
3. Methodology	10
3.1. In-Depth Interviews	11
3.2. Campaign Testing	14
3.2.1. Frequency Tests.....	15
3.2.2. Audience Analysis.....	15
4. Results and discussion	19
4.1. Online Users and their Perception of Digital Advertisement.....	20
4.1.1. Understanding behavior.....	21
4.1.2. Personalization	22
4.1.3. Feelings towards Online Advertisement	22
4.2. Frequency and recency optimization	23
4.2.1. Repetition driving performance	24
4.2.2. Test, learn and adapt.....	29
4.3. The Power of Data and Knowledge	30
4.3.1. Broad or Interest	31
4.3.2. The importance of knowing your audience and their interests.....	33
4.3.3. Types of Audience	35
4.3.4. Retargeting	37
4.3.5. A final look to Audiences	38
5. Conclusions.....	40
6. Limitations and recommendations for future works	43
7. Bibliography.....	45
8. Annexes	51
8.1. Interviews	51
8.1.1. Interviews Questions.....	51
8.1.2. Interview Answers	52

LIST OF FIGURES

Figure 1 - Methodology Summary.....	10
Figure 2 - Share of Clicks by Frequency for an Used Car E-Commerce Platform.....	25
Figure 3 – Conversion Rate by Frequency for an Used Car E-Commerce Platform.....	26
Figure 4 - Share of Clicks by Frequency for a Furnishing Company	27
Figure 5 - Conversion Rate by Frequency for a Furnishing Company	28

LIST OF TABLES

Table 1 – First Test, Broad Reach versus Interest, Ad server Data	31
Table 2 – First Test, Broad Reach versus Interest, Analytics Data	32
Table 3 – Second Test, Personas Comparison, Ad server Data.....	33
Table 4 – Third Test, Personas Comparison, DSP Data	34
Table 5 - Fourth Test, Type of Audience Comparison, DSP Data	36
Table 6 – Fifth Test, Prospecting Versus Retargeting, Ad server Data.....	37
Table 7 – Sixth Test, Audience Strategy Comparison, Ad server Data.....	38

LIST OF ABBREVIATIONS AND ACRONYMS

Programmatic	A method of buying advertisement space online, where the advertisers can buy inventory in real-time from a number of sellers, using different buying criteria to purchase the space and even the user they detect might be watching on the other side.
RTB	Real-time-bidding is the way of buying the advertisement space in the Programmatic method. As the name indicates, the advertisers are bidding in real-time to purchase the space and display their ad. In a matter of a fragment of a second the advertisers know they have a space to buy that will be displayed to a certain user with certain characteristics, and the technology will decide how much to bid and who to sell the space to.
Ad Server	Platform used by advertisers or media agencies to create campaigns running across multiple channels. All the campaign is created under this platform using tracking codes that are later sent to the multiple channels. This way it's possible for advertisers to find a campaign information consolidated in one unique platform, allowing comparison of results amongst the different channels.
DSP	Demand Side Platform, used by advertisers, or representative buyer, to purchase advertising space online.
SSP	Supply Side Platform, used by online publishers and websites to sell their inventory space to advertisers.
CRM	Customer Relationship Management, companies' area that is responsible for managing all data collected from their own customers.
Broad Reach	Campaigns that have the goal of reaching has many users as possible, so usually ran with little or no audience.
Performance	Strategy used for campaigns that have a specific goal, such has sales or to generate leads, and therefore are looking to impact users with high probability of performing those actions.
Impressions	Every time an advertisement is downloaded on a websites page, the platforms will considerer an impression.
Click	Every time a user selects the advert and usually is sent to the advertiser's website or social network. It's a metric that usually advertisers see has an indicator that the users were interested on the ad.
CTR	Click-through rate is the number of clicks that your ad receives divided by the number of times your ad is shown.
Conversion	An online conversion is a term associated to the campaigns goal. Every time the user performs an action that the advertiser has previously defined as a conversion

and therefore created a tracking code to be able to detect every time the user performs those same actions.

Unique User Identifies how many users have seen the campaign. Each user is detected considering their device IDs, so we are never 100% sure a unique user is one person, since a person can have multiple devices and therefore two unique users still might be associated to one person.

Frequency The number of times a unique user has seen the ad of a certain campaign.

KPI Key Performance Indicator is associated to the goals of the campaigns and allows to understand whether a campaign was successful on achieving its goal.

1. INTRODUCTION

In an Era where everything can be found online, consumers are growing impatient and demanding day by day. With the rise of a new Generation and their arrival to marketplaces, companies need to change the way they play the game, especially in the digital world (Bassiouni et al., 2014).

In the past, not every company saw the need to create a brand and a slogan, but as the world evolved companies without a brand were no longer relevant. Today we are seeing a shift of power, where the company value no longer depends only on their assets but primarily lies on their consumers and the way they perceive brands and interact with them (Gutfreund, 2016). So having a brand is not enough, and companies need to make sure their brands know how to talk to each of their consumers.

In an online environment, it is more critical for a brand to engage and interact with its consumers or potential consumers (Pereira, 2020). Most brands have created own social network profiles, so they can be closer to online users and especially to their consumers. Nevertheless, most importantly, brands started using digital channels to advertise and reach actual consumers and potential ones. Furthermore, what better place for the advertiser than the one place where information is just ready to be used?

Advertisement has been around for quite some years and even decades now, starting offline and has moved to the online world in more recent years. Communication has become one of the main drivers of revenue for the brands for some decades, and without it, brands lose clients to their competition. Without publicity, consumers would not know the brand existed and would be unaware of which products to buy. A brand that communicates its product correctly is just informing the consumers that their product has certain qualities capable of beating the competitors, which will lead to more revenue for the brands that advertise (Ilyas et al., 2020).

With the rise of the new Personalization Era having a voice is not enough but adapting the speech to the receptor is the new gold. Furthermore, all of this is only possible with the use of Data. This need for Data makes Digital advertisement the perfect growing soil for this new phase of Advertisement. It has become more and more simple to adapt the message each user sees on their device, all thanks to the massive pool of data that companies can gather every day and every minute (Kotras, 2020).

Through the use of Digital channels, Brands can impact users by their interests and preferences, by their navigation history, and more granularly, by the products they have seen on their web site in previous moments. This can be done using Programmatic Campaigns, a new model of digital advertisement that consists of buying advertisement space in real-time, showing the right ad, with the right message, at the right time to the right person (Salonen, 2021). An online digital advertising strategy that has refined this personalization technique is e-mail marketing. Thanks to the information companies gather from their customers, they can personalize each email they send to their consumers (Babet, 2020).

However, many online users are uncomfortable sharing their information, especially when they understand that their information is being used for advertisement purposes. This is mainly due to some scandals, such as Cambridge Analytica, that has caused distrust amongst online users (Yang, et al., 2013). Everything a user does online is being monitored by the websites, platforms, and apps.

Consumers need to be conscious that their information is not private online and that when they are using a free service online, most probably, their information is being used in return (van Gogh, et al., 2020).

Due to the fast growth of digital advertisement and incremental use of users' information, there has been an increasing fear from online users regarding this misplaced use of their online information. This fear has shifted the way users operate online and led to some changes to the industry that impacted all the intervenient (Johnson, et al., 2021).

Due to this growing concern, European Union has created a new regulation that came into practice in 2018 which limits the gathering and use of users' online data, called the General Data Protection Regulation (GDPR). This new regulation has given the power to online users to opt-in, or not if they want to share their online information with the online platforms and websites they are using (Aridor, et al., 2020). This has given the power to inform users to restrain some companies from knowing and using their information for advertisement purposes.

Consumers are approached by brands almost every minute of their day, from the moment they wake up to the moment they go to sleep, which has created an emotion of almost aversion towards advertisement (Singh, et al., 2021). When these ads are not relevant to them, then they just become objects of their dislike, and so due to that, we have seen an increasing number of Ad Blocker downloads in the last years.

This tendency has created a problem not only for the Brands but also for the publishers that depend on online advertising to generate revenue. The more ad blockers are installed, the less advertisement publishers are selling (Aseri, et al., 2020). When website news opens on some users' computers, the publisher will receive money for every ad that is displayed to that user. However, if the user has an adblocker, no ad is displayed, meaning less ads the publishers will display in a day, which leads to less money for the publisher to receive from the advertisers.

This phenomenon of Adblockers download increase is happening for a reason. Ad space has become overcrowded and exhausted in the last years, to the point where consumers perceive online advertisements as intrusive and tiresome (Truong et al., 2010). With Ad Blockers in trend, both players in the advertisement industry face a challenge. Sellers and buyers need to answer their problems to keep their business relevant and generate money. How can Publishers generate revenue, and how can advertisers keep communicating?

Publishers and online content creators have to find a balance between the correct number of ads to deliver so they are not exhaustive. They need to generate revenue without being perceived as unethical and therefore lead consumers not to want to share their information (Su et al., 2021). Brands need to stand out in the middle of so many ads that are being displayed every minute. They know that to gain consumers attention, they need to be relevant. However, how can they be relevant every time they speak to the people who stopped listening?

The digital advertisement industry has increased over the last decade and evolved exponentially from year to year. With the rise of new technologies, computer software and data analysis, and many points of the users' digital journey, it is possible to help Brands to use that data to be more relevant and therefore be less intrusive and more accepted by the users (Tucker, 2013).

With this Data collected across many platforms and websites, Brands can know which user their Online Advertisement has just encountered and display the message and image according to its interest, needs or wants. We know that this is an innovative method to advertise online and it still generates some discussions regarding the use of data and the privacy invasion it entails on users online (Watts, 2016).

This research aims to study how digital advertisement is perceived amongst online users and how the way it is used can have better or worse results for brands advertising. Can personalization in digital advertisement can lead to a significant difference in results when compared to more traditional methods of online advertisement? Does adapting the message lead consumers to interact more with the ad, and does that interaction lead to more purchase intention, while contributing to a more friendly user experience to the consumer, as well as helping for a better quality of the global online advertisement?

In order to understand how online users have perceived advertisement, we will approach some users, both adblockers and non-adblockers users. We want to understand how they feel about online advertisement and if and how it has influenced the way they use the internet over the years.

We hope to understand what makes online advertisements so annoying for specific users and tolerable for others. That way, we can adapt digital campaigns to avoid features that lead to users' frustration and dislike and to reinforce features that lead to users stopping and noticing the ads.

Not only do we aim to understand which features make advertisement more or less popular, but we also intent to put them to the test and check how they can be used to lead to better results. For this, we will run digital campaigns of different vectors and industries at different moments and promote different products or services. This way, we can understand if specific settings and strategies on online ads can lead to better performance. The performance will be measured differently for each campaign, depending on what the advertiser's goal for the campaign is, so all tests had to be compared within the same campaign environment.

Regarding Data leading to better performance, we aim to understand if having more relatable creatives shown to the right users might lead to better performance. This will be studied again by running digital campaigns from different industries and promoting different products. We will be evaluating the performance of each audience and conclude if users are more willing to show interest in the ads and if they are adequate to their interests and needs.

This research starts by presenting an overview of the research in the first section, Introduction, where it is possible to introduce digital advertisement and how it has evolved over the years and also explain how the research is structured.

In the second section, the Literature Review, we share some relevant references from previous studies that helped us get more insights into how users have perceived digital advertisement. Furthermore, we also review the contribution of digital advertisement to help advertisers communicate their brands and monitor the results. We were only able to gather some conclusions regarding the overuse of online advertisement and how this is hurting the industry and leading to less revenue for online content websites.

In section 3, Methodology, we detailed the procedures and steps taken to study the questions made. We had two main focuses:

1. First, to understand how users perceive online advertisements and how comfortable they are with sharing their data online. With the help of Qualitative Research, we interviewed Portuguese online users to understand how they feel about digital advertisements. The interviews focused on two groups of people, the ones using adblockers online to avoid seeing ads and those that do not use any blocker and therefore are still being approached by an advertisement online.
2. Secondly, to study how campaigns can be planned and implemented, so they achieve better results for the advertisers and offer a better online experience for users they are impacting. This was analyzed by running some campaigns from different brands and industries to understand how certain features might lead to a communications better performance and results. We started by analyzing frequency to conclude whether repetition is a driver of results or a blocker and moved on to study audiences to understand if using them leads to better performance and if the different types we can use present different results amongst them.

Once the methods used were detailed, we get to section 4, where the study results are presented, and conclusions are shared with the readers. This section is divided into subsections, considering there were different approaches used and different questions asked in this study.

For the first subsection, we were trying to answer how Portuguese online users feel about the online advertisement and how that might be a more negative feeling that eventually leads some to use adblockers. We also questioned them about the sharing of their information online and how they feel about it being used for marketing purposes. This section shares the results from interviews with a group of Portuguese online users.

Next, we have the subsection that studies frequency, a feature that allows brands online to define the maximum number of times an online user can see a specific ad. We tried to understand the performance of a campaign depending on the number of times a user has seen the ad. That way, we could conclude whether repetition is a driver or blocker of results.

For subsection 3, we dived deep into the analysis of the audience, to conclude that by using them on digital campaigns, we drive better results for the brands. The subsection itself is divided into various chapters, each focusing on testing different types of audiences to conclude if there are types that lead to better results than others.

Once the results and discussion are presented, we approached the Conclusions section, number 5. This section focused on wrapping up and gathering all the insights from the previous analysis. Once all studies were finished, we could conclude that there are certain recommendations worth sharing with the digital advertisement community, to avoid mistakes that have been made in the past and help brands evolve their communication in the future, in a way that also helps online content creators to keep they revenue.

The final section is Limitations and recommendations for future works, and in this chapter, we will share some shortcomings of this study that can be seen has a learning for future works. The study

had to focus on particular methods and analysis, not making it possible to approach other methodologies that would also be interesting to study for these questions.

The chapter not only enumerates those methodologies that could also been approached but also recommends them for future researchers so that there are more detailed insights on some questions that arise during the study.

2. LITERATURE REVIEW

Over the past decades, we have seen Online Advertisements evolve and receive a more significant portion of the budget from the Brands Marketing Budgets (Liu-Thompkins, 2019). With so many different channels to advertise on, it is important to understand the pros and cons of each one of these channels and allocate the right budget to each strategy and communication (Tauro, et al., 2021).

We have seen digital increase its share of marketing budget in many companies and in different economic sectors, with Political Marketing being one of the most recent adopters (Williams, et al., 2018). The usage of digital has become very popular over the years on Political campaigns and the lack of regulation and the power of micro-targeting has led to some discussion regarding its usage (Fernandez, 2020).

The development of technologies has allowed for companies to interact more with consumers and users online and keep them engaged, at a very personal and even individual level (Lee, et al., 2020). With this increase adoption of Digital Advertisement, all intervening in the online landscape industry must understand that the online environment needs to be regulated to avoid advertisement that could be illegal, discriminating or offensive (López Jiménez, et al., 2021).

Advertisers, usually represented by media agencies, and online publishers need to make sure advertisement online is done in a correct and legal way and must not forget to ensure a friendly user experience, or users will just grow annoyed by it (Ha, et al., 2008).

Advertisement done poorly can lead to very negative sentiments, not only on digital but in every channel. An offensive campaign can easily result on a catastrophic downfall for a brand, so they must be very careful on how they communicate, and on digital specially where once something is live, it is impossible to control and eliminate (Abdel Hamid, et al., 2019).

Not only has digital become a problem for brands and has pressure them to be more careful on how they communicate, it has also increase the number of misinformation online, with many unreliable sources sharing information just to generate revenue, and without any veracity to their contents (Gomez-Mejia, 2020).

The digital environment is more and more crowded, leading to a sense of overwhelming intrusiveness by advertising brands. This phenomenon is called the “advertising clutter” (Rejón-Guardia, et al., 2014). The online users are getting so upset that even if they see an ad that might be relevant to them, they will not be interested just because they are tired of being “attacked” online. It is important to understand what the consumers perceive as offensive or bothersome advertisements (Zeng, et al., 2021).

With the number of adverts consumers are approached by every day, it is expected that they no longer feel inclined to stop and read one of them (Ha, 2017). Most websites have opted to use ads that are more easily seen in the users’ screen, since they showed better results, but they have also presented ineffectiveness if poorly used (Goldfarb, et al., 2011).

The sites continue to over exhaust their space, delivering more ads than the consumers want to see, leading users to the Ad Avoidance behavior (Palmieri, 2018). The fact that they have the power to

skip them or even more, stop them, is reshaping the entire online advertising industry (Pleyers, et al., 2021). Every brand's goal is to be relevant and gain their attention, but should they do it with no criteria?

2.1. ADVERTISEMENT LEADING TO THE RISE OF AD BLOCKERS

Online Advertising has its origin in 1994, as a way that web sites discovered to finance their content creation. Without advertisement being displayed on their websites, these publishers and companies would not have a source of revenue for their businesses (Ivanjko, et al., 2017). Not only is online advertisement important to the ones that sell advertisement space, but also to the brand that buy those spaces, primarily due to the impact it has proven to have on sales (Breuer, et al., 2011).

Display ads are one of the very first forms of online advertisement, characterized by the banners that are displayed on content web sites, such as news, tech, cars, and other sites from content publishers. In a recent study, publishers worldwide were asked to evaluate which channels were more important for their digital revenue, and 81% of the respondents stated that Display Ads are essential or very important (Newman, 2019).

Nevertheless, with the increase of online advertisement, more advertisers started to use the digital channel. More websites started selling advertising space, so much so that the internet has become overcrowded (Arora, 2019). The online world saw the need to defend users from all the ads, so Ad Blockers were created. These are tools that when the user installs it on their browsers, can prevent the ads from being displayed on their computer (Bubna, 2013).

The most intrusive the banners, the more users are going to install ad blockers. Web sites need to consider eliminating invasive banners if they want to be more appealing to their online users (Resnick, et al., 2016). Web sites managers need to understand that the more ad blockers are installed, the fewer ads they will show on their sites, which will need less revenue by the end of each month (Jayanthi, 2021).

This evolution of the ad blockers downloads and usage has led to one of the biggest threats in the digital world, leading to a decrease of campaigns results and inefficiency of the digital marketing itself (Wielki, et al., 2018).

Previous research has shown that most web sites display a large number of ads on the home page, with Car category sites presenting the highest number of ads (Miklosik, et al., 2018). Most users are growing tired of online advertisements and cement an aversion to the ads due to their constant appearance (Brinson, et al., 2018). With this in mind, this study would like to understand how the use of ads on a web site might be impacting the Ad Blocker downloads.

The Interactive Advertising Bureau studied why users were using ad blockers and whether they were willing to stop using them. From 1 292 answers, 330 users already used ad blockers, 478 never had used them and had no intention the begin using, 260 had already used and stopped, and 224 were thinking of starting using (IAB, 2016).

The study was international, so we tried to understand how the situation was in the Portuguese Online Landscape. According to Statista.com, Portugal is one of the top countries regarding adblocking penetration, with 31% of the online user's population using it in 2018 (Guttman, 2019).

Ad blockers started to help prevent ads on the users' side, but in more recent years their purpose started to change, mainly due to the harm the intervenient saw it was doing to the industry. Some ad blockers now allow the publishers to whitelist some ads. This means that even users who have ad blockers installed are still able to see some online adverts, as long as those site they are using are certified by the company managing the ad blocker (Subramanian, et al., 2021).

2.2. USE OF DATA TO SEGMENT ADVERTISEMENT

When we talk about digital advertisement, people's minds immediately think of social networks but there are many more ways to advertise online (Breitwieser, 2020). One of the most promising methods is Programmatic, a new form of advertising that allows agencies to buy media space online in a fraction of a second (Busch, 2016). Brands will show an ad depending if the ad space they are actioning entails the features of the ad the brand want to display, and the user watching matches the targeting criteria the advertiser defined previously (Wirth, 2017).

Studies have shown that this new advertising method has a positive impact on the internaunts, especially the younger generations (Lim, et al., 2021). It is important to understand how this method can be applied correctly and how to have access to the right and legal information from users to display the correct and relevant ad to them (Johnson, et al., 2021). There are many advantages from using online data behavior to approach users but there is also risks to it, specially the use of information and legal right to use it (Aiolfi, et al., 2021).

Programmatic campaigns buy impressions (term used for when a user see the ad) in Real-Time Bidding (RTB) method. Agencies and Brands, through a platform called Demand Side Platform (DSP), can set up the rules for when they want their ad to appear. They can define criteria such as geography, demographics, data that reflects the users interests, or even implement tracking signals on Brands web sites to know the latest users navigation (Kuang-Chih Lee, et al., 2013).

Due to all this data and Artificial Intelligence platforms that allow for the Real-Time Buying approach, Programmatic campaigns can involve much more costs than traditional display campaigns (Seitz, et al., 2016). Advertisement and Media Agencies have been struggling to prove to their clients that, even though Programmatic campaigns can be more expensive, they deliver better results and contribute to a better online user experience (Strauss, et al., 2016).

Agencies need to prove to Brands that using Programmatic is not a cost but an investment, and data is the number one argument (Brosche, et al., 2016). Through the use of data, brands can not only find their consumers online and impact them with ads, but they can also use what they already know about their clients to find new prospecting ones online, inducing purchase intention and gaining new clients (Shen, et al., 2015).

All this data that allows Brands to find users online is gathered through little statements of code called Cookies. They are implemented in each user's browser, and the websites can then know their navigation pattern, and Programmatic Advertising uses that information to perfect the campaigns and aim for better results for their communications (Saura, et al., 2017).

This data collection is very useful for the Advertisement industry. However, it has raised some concern amongst internet users over the last years, as they grow more and more educated regarding the online environment (Palos-Sanchez, et al., 2019). Not all are as well informed, and some studies

have shown that consumers are more receptive to a personalized advertisement, but they actually do not understand that brands are using information that has been harvested from themselves (Järvinen, et al., 2015). However, some other users are aware and have expressed their concerns, which has led some companies to start taking care of their actions when using online users information (Sun, et al., 2021).

3. METHODOLOGY

In order to study the perception users have of the online advertisement world and understand how different campaign strategies can lead to different results, we will start by applying an Exploratory Approach for the first question and a Conclusive one for the latter.

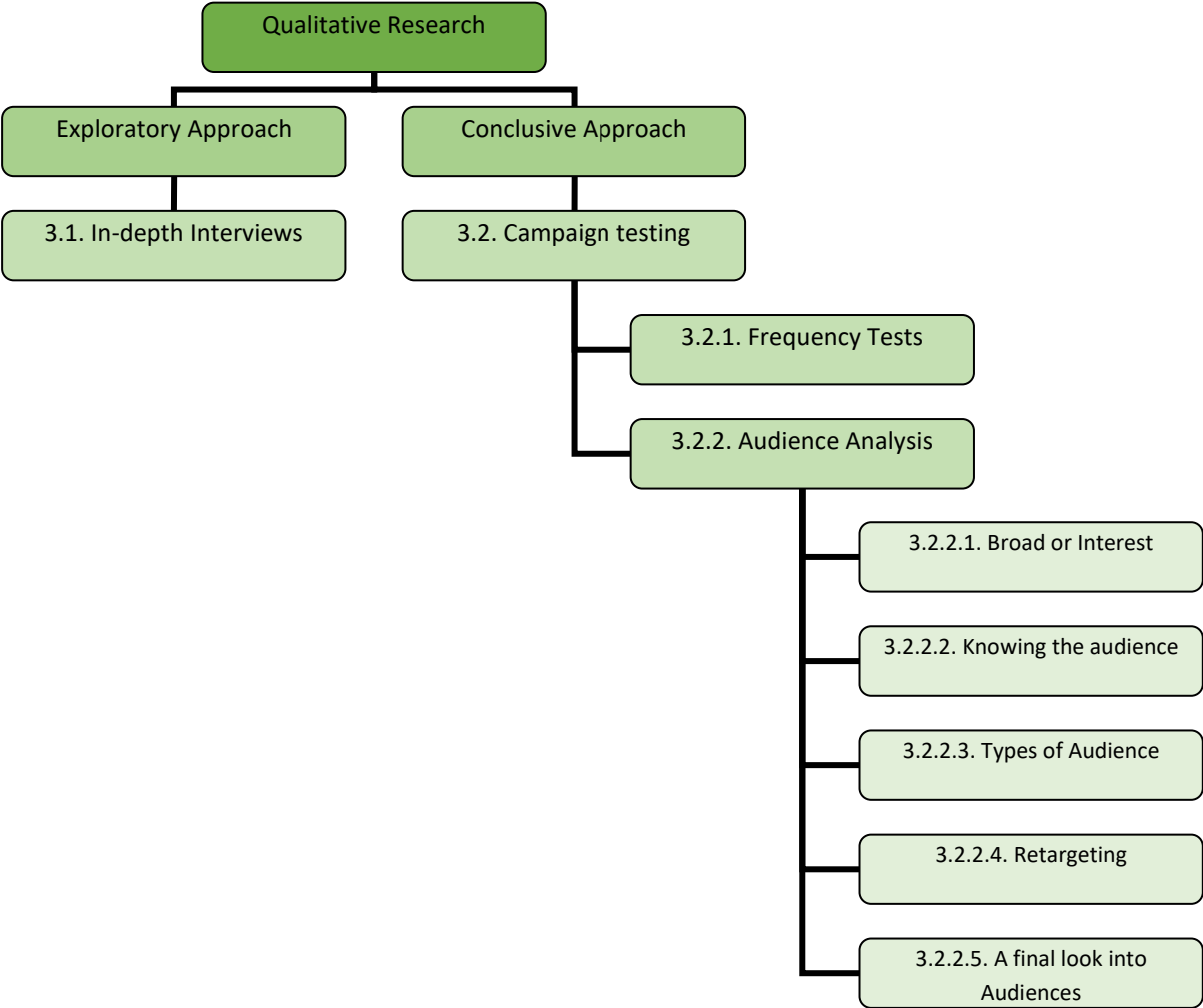


Figure 1 - Methodology Summary

This study will start with the Exploratory Approach, first to understand users’ opinions regarding the digital advertisement environment and the use it makes of their personal data. To gather these opinions, several in-depth interviews were executed. Interviews were preferred over surveys to gather more qualitative opinions of online publicity and the sharing of their information on the online world. The main focus of the interviews was to understand the users true feelings towards online advertisement and the use it might do of the information users share online with different websites and brands.

After it will tackle a conclusive approach, by running several campaigns in a real digital environment. The purpose of this campaigns was to test features such has frequency and audience on online campaigns that can influence the performance of the campaigns and lead to better or worse results for the advertisers.

3.1. IN-DEPTH INTERVIEWS

The study first started with the in-depth interviews. Focus group was initially considered, but the lack of control over the discussion could lead to more confusion than conclusions so we decided to conduct in-depth interviews instead. Also, focus groups could lead to peer pressure, meaning the users might adopt opinions from others by influence instead of sharing their true feelings over advertisement.

For this research only Portuguese speakers were interviewed. The reason behind it was because it aims only to understand the Portuguese Online Advertisement Landscape, especially because we are only looking into the Programmatic solution to advertise, that makes use of mostly news and content websites from Portuguese language.

Some studies have shown that gender and age might have a correlation with the aversion users feel towards advertisement (Rus-Arias, et al., 202). For that reason, we decided to interview people from different gender and ages, so we could have more diversified opinions and gather different opinions of the digital advertisement.

The interviews also approached the adblockers usage to understand where different people stand on their existence. We chose to divide the interviews into two groups. All should be internet users who use it for more than Social Networks. We made sure half of the interviewees used adblockers, and the other half did not, so we could compare their online experiences and their opinions on digital advertisement.

To select the people to interview, the study had to make some pre-selection to understand if the person would contribute with valid opinions on the issue in discussion and if they demonstrated interest on the topic. Some had shown total lack of knowledge regarding the internet usage and were not familiarized with the digital advertisement world, not even recalling seeing ads online. Therefore, those were not selected to proceed with the in-depth interviews.

There were some users who had shown lack of knowledge in some topics, such as the sharing of information online and the adblockers existence, but they still had interest in online advertisement and shared a curiosity that presented relevant to the study.

The interviews were made to both female and male internet users, since for this study it was important to gather opinions from both genders, without being required an even share of females and males. It was also important for this study that the interviews approached users from different ages, so we interviewed users from age eighteen to sixty-two. This was to help us gather more diverse insights, since depending on the users age there is going to be different internet experiences and their history with the digital world will be different.

The users interviewed had different occupations, with the youngest being university students, and the remaining ones being college graduates. We interviewed a law graduate, graduates from economics and finances and engineering graduates. Finally, we also interviewed two users who are psychologists and contributed with some insights regarding the role marketing plays as an influencer of consumer behavior.

The interviews happened within the same week to avoid different circumstances from the online world that could influence a difference in opinion. The answers needed to be all collected close in time to avoid significant environmental alterations, and therefore, on the answers. Advertisements can be more active in certain times and days of the year, such as Christmas, Back to School and Black Friday. It was important to make sure the interviews were conducted around the same time to avoid different opinions based on the clustering of ads around those times.

The in-depth interviews made use of two different techniques:

1. The Hidden Issue Questioning methodology, which made it possible to focus on personal feelings users demonstrate over advertisement, some personal concerns at a deeper level that we would not be able to gather using different methodologies.
2. The Symbolic Analysis, used to question users on how they would feel about advertisement if it did not exist and if they stopped seeing ads online. This technique was used on the final question to understand if the users would prefer to avoid online advertisement if it meant paying a fee.

The interview had a total of 8 questions, for both Adblockers and Non-Adblockers, to avoid more extensive conversations on one side than the other. The goal was to gather how users perceived online advertisement and if that changed depending on them being ad blockers users or not.

In summary, for the Adblockers users we proceeded with the following questions to interview the users:

1. How many hours per day are you usually online for personal use, besides to use social networks?
2. For how long have you been using Adblocker?
3. Why have you installed an Adblocker?
4. Would you prefer online ads if you felt they were useful information? So only see ads from brands and products that interest you?
5. Are you comfortable with sharing your online information so that brands know your interests and give you that relevant information?
6. Do you recall seeing the same ad repeatedly? If yes, would you like the option of stopping the ad of showing again?
7. Do you recall seeing the ad of a brand that you dislike? Would like the possibility of blocking just those brand or products that you would prefer not to see?
8. When a service we use is for free, it usually means they make money out of publicity. So the price you pay to use the service is being willing to see a lot of ads. Do you still prefer that is free or would you prefer to pay a subscription and not see any more ads?

For the online users that don't use Adblockers we asked the following questions:

1. How many hours per day are you usually online for personal use, besides to use social networks?
2. Do you recall seeing online advertisement? How often did you saw ads online? Every time you use it or just occasionally?
3. Have you ever thought of using Adblocker? If yes, why not yes? If no, why?

4. Would you prefer online ads if you felt they were useful information? So only see ads from brands and products that interest you?
5. Are you comfortable with sharing your online information so that brands know your interests and give you that relevant information?
6. Do you recall seeing the same ad over and over again? If yes, would you like the option of stopping the ad of showing again?
7. Do you recall seeing the ad of a brand that you dislike? Would like the possibility of blocking just those brands or products that you would prefer not to see?
8. Every time a service we use is for free, it usually means they make money out of publicity. So the price you pay to use the service is being willing to see a lot of ads. Do you still prefer that is free or would you prefer to pay a subscription and not see any more ads?

The first three questions asked were related to their behavior online, so we could understand what might have led adblocker users to start using it, while the non-adblockers users chose not to (Tudoran, 2018).

For both adblockers and non-adblockers users we started with the same question, to understand the number of hours they spent online on news sites or e-commerce purposes so we could understand if that was an indication for them to be adblockers users or not.

For the second and third question we had to ask separate questions for adblockers users and non-adblockers users. For the adblockers, we focused on asking for how long and why they have adblockers. For the non-Adblockers we tried to understand if they recall seeing many ads online and if they ever thought of using adblockers. This way we could study whether there was a pattern on their answers that proved adblockers to have a more apprehensive feeling towards advertisement online.

The fourth question tried to understand if users would feel less aversion to advertisement if they felt it was more informative and aligned with their individual interests. Some previous studies have proved that the personalization of ads leads to better campaign results. It was possible to detect an increase of the click rate on creatives that were personalized to the user that was exposed to them, in comparison to the ones that presented the same message for all users, without considering their interests (Deng, et al., 2019).

The fifth question aimed to understand how user feel about sharing information online and having that same information used for advertisement purposes. Some previous studies show that the privacy concerns was one of the main incentives to start using ad blockers (Sołtysik-Piorunkiewicz, et al., 2019).

For the sixth and seven question, we realized from previous research that many adblocker users showed a higher annoyance towards online advertisement, so we asked the interviewees if they recalled seeing the same ad many times, or if they recalled seeing a brand advertised that they disliked (Young, 2016).

The last question tries to understand if users are aware that the price they pay to consume the free information online is actually seeing the ads (Pujol, et al., 2015), and once knowing this if they would be willing to pay a small fee to stop seeing the ads.

Interviews were conducted on a video call environment due to Covid pandemic constraints that did not allow to meet personally.

Once we were able to collect some insights into how online users perceive digital advertisement, we could proceed with the Conclusive approach. The goal was to run some campaign analysis to verify whether certain features influenced negatively or positively the performance of the online campaigns.

3.2. CAMPAIGN TESTING

For the Conclusive approach, we used secondary data, mainly collected from campaigns of different Advertisers, from various economic vectors, to study the performance of the many features and strategies that can be applied in digital advertisement.

The data collected is from an advertisement agency that provides digital marketing services to different advertisers. All the campaigns used the Programmatic buying method, and the source of data was the different platforms that allow to collect information from the users that saw the campaign. These platforms don't collect personal information from the users, but only record their actions towards the adverts they have seen and the behavior they might have on the brands website that might result from the adverts interaction.

The campaigns in the study ran at different times of the year and focused on different types of communication. Therefore, they had different strategies and goals depending on the product and action the advertiser expected from the users.

For the frequency test we ran campaigns with a minimum of 1 month duration and we had to guarantee the volume of impressions deliver was statically significant. The campaign selected had to comply with a certain minimum budget value so we could gather sufficient information to be able to take conclusion out of the results.

For the audience analysis, the most important was to make sure each campaign analyzed was done by using an A/B testing method. The features we will study need to be the only variable changing between set ups to compare the performances. In contrast, the remaining features need to be the same.

The campaigns data was extracted from different platforms that are commonly used by the digital marketers to report online data. The test results later showed in this research use three different platforms as their source of truth:

1. Ad servers, platforms that allow to implement and aggregate information from digital campaigns across multiple channels. With this platform we were able to collect information such has impressions, clicks, click through-rate, conversions post-impressions, conversions post-click and viewable impressions.
2. DSP, so the platforms that allows programmatic professionals to buy online inventory in real time while applying specific targeting criteria. This platform allows us to gather the same information as the one listed for ad servers, but the advantage in this case is that the DSP allows more granular reporting. With this platform we can report conversions and

understand performance at an audience, site, device and even type of browser level. This platform also enables us to gather information on how much the campaign as invested, meaning, how much money a brand had to spent in the campaign to buy inventory online.

3. Analytics platforms gather data collected from the advertiser's web sites. With this platform we can report how many users landed on the web site that came from clicking on a campaign or even on a specific advert. We can also report how many pages those same users saw while on the website, for how long they remained there and if they performed certain actions that could be considered conversions.

Depending on the tests we had to perform, some platforms offered more relevant data than the others, so certain test used one platform as a source a truth while others might have used 2 or even 3 sources of truth to get to better conclusions about the campaigns performance and therefore the tests results.

3.2.1. Frequency Tests

First, we will look at the frequency feature. Campaigns, when implemented, can be set to show the ad a maximum number of times to the same user. This option is called frequency cap, and when set up on the campaign, it will make sure it does not show the ad to the same user more than the number we defined.

By the end of the campaigns, we can conclude the average number of times users saw the campaign. We will try to understand if these averages present different results depending on the campaign's performance. The source of truth for this test is the DSP, platform where the campaigns were run. Its stands for demand side platform and is where we bought the inventory while defining the features and criteria of how the campaign should be delivered.

The platform aggregates the users in groups, depending on the number of times they saw the ad of a certain campaign. That way it was possible for us to analyze each of this groups and understand if users who had seen the ad more than three times, for example, showed more interest than users who had seen it only once. This interest was evaluated depending on the outcome it was expected from the campaign, so either a click on the creative or even a conversion on the advertiser's website.

3.2.2. Audience Analysis

Secondly, we will study the audience targeting strategies. As previously mentioned, many studies have led to believe that the use of segmentation on online campaigns lead to better results for the campaigns. Also, after the in-depth interviews we were able to determine some users were keener on being approached by advertisement if they know it's going to be closely related to their own personal interests.

With that in mind we proceeded with campaign tests, to understand how performance might vary depending on using audiences or not and depending on the type of audiences being used. Campaigns had to be implemented taking into consideration the tests so we could gather conclusions in the end. The method used to implement the campaigns is called A/B testing, where the campaigns will mirror every feature, except the one we are testing, so that the results will vary only due to that one factor while the others remain constant.

To make sure the comparisons are correct in this analysis, we also needed to previously define the specific metrics we should evaluate throughout each test performed on these campaigns for the study. Only by doing this can we understand which campaign strategies shows the best performance compared to the others. Depending on the goal of the campaign and what the advertisement is trying to communicate, we will define the goal and, therefore, the Key Performance Indicator (KPI) to make sure we are able to state which lines lead to better performances and if a certain audience type might be more efficient than the other.

For this Conclusive Research, we needed to consider the campaigns length and budget to make sure they could enable us to conclude something from their data. For a campaign to be able to provide us with some insights, we need it to have a particular duration, a month or more, and a particular budget value depending on the campaign's goal.

Each campaign's goal might lead to different audiences or inventory, which might mean a more or less expensive buying. Therefore, we need to consider the budget to ensure it will enable us to collect the correct number of impressions, users seeing the ad, or even clicks and conversions, so we have a solid comparison base.

The source of truth for the audience tests is ad servers, which are platforms that aggregate campaigns running in different channels, so not only on programmatic but also on direct buying and social media platforms. These platforms also track conversion information, making it possible to understand the real outcome of the campaigns we are running for the tests. Conversions are usually measured actions on the advertiser's website, such as the filling of a form or them requesting to be contacted by the company. These actions allow us to understand if the campaign was successful in leading users to perform those actions.

We also presented data from other platforms. One was an Analytics platform, that allows us to gather data from advertiser's website and check how many users arrived there after clicking on the adverts from the campaigns. Another was the DSP, so we could share conversion data for certain campaigns whose advertisers weren't tracking conversions via Ad server. For that reason, we needed to extract the conversion data directly from the DSP where we were running all of the programmatic campaigns.

3.2.2.1. Broad or Interest

The first test we ran aimed to compare the results from a campaign that used audiences versus a campaign that didn't use audiences at all and simply approached users disregarding their online behaviour and profile.

It was necessary to first understand the advertiser's brand and product being promoted, so we could select audiences closer to their profile and target audience. The budget for the campaign was split in two, so both parts running had the same chance of approaching the same number of users for conclusions purpose.

3.2.2.2. Knowing the audience

Not only can a campaign run with or without audience targeting, but within audience targeting, there are different forms of collecting and perfecting the audiences to use on the campaigns. This study

also ran some campaigns to test how different segments and interest might have different results for the same advertiser, depending on the interests and if they are or not more correlated to the product and the target population.

For this test it was necessary to initial talk with the advertisers and better understand the consumers profiles for the products being promoted. Only after was it possible to define different groups of personas associated to them and create audience profiles from different interests. We created groups of interests that characterized a certain profile and allocated the same budget for all the groups, so in the end we were able to compare results and understand which profile presented better performance.

3.2.2.3. Types of Audience

The audiences can be collected and aggregate using different methods. We can use audiences that have been collected using data from the advertiser website, or data collected by a partner with the user's permission. Data can be collected in many ways and curated using different methods. With that in mind we also ran tests that would helps us understand which types of audiences could lead to better results.

An audience can be created depending on the user's behaviour and interests, but it can also be created depending on words that can be found on a website, or even depending on users intentions, depending on what we see has been their researches on online search engines.

The study decided to explore these different types of audiences and the different results they can bring to a campaign and the results they can lead to. Once again, the methos used was A/B testing, so we could evaluate the performance of the campaigns and compare between types of audience. We aimed to distribute the budget evenly amongst the different types of audience, but because each have very different scale than others it was impossible to gather the same number of impressions for each. This also helped us understand how scale, meaning possible number of users we can reach within a certain audience, might differ and how a small audience does not mean necessarily a worse performance than a bigger one.

3.2.2.4. Retargeting

One of the most popular audiences to use online are the Retargeting audiences. These are audiences created from actions the users might have taken online, usually on the advertiser's website.

They are built using 1st party data, so data owned by the advertiser, and usually means the user as already showed interest on the brand and product, which might mean that these audiences are aggregating users with high probability of converting and therefore will present a better performance for the campaigns.

This audiences are usually small, meaning they do not aggregate many users we can possibly reach, and finding them online might also be very difficult, which usually translates in high cost of impressions acquisition.

3.2.2.5. A final look at Audiences

By the end of the campaign testing, we were hoping to conclude which audiences are more effective for the different goals and purposes of the advertisers. We took a final look into the different types of audiences tested and even ran a final campaign that places all types of audiences facing each other so we could compare performances amongst all of them.

With this test the main goal was to understand how different audiences compare against each other and if there could be possibly exist a standard budget distribution amongst audiences that could results on high probability of leading to better results.

4. RESULTS AND DISCUSSION

Online advertisement has existed for quite some decades now. However, different methods and channels are created every year that reshape the industry and lead to new advantages. It leads to new threats for the ones that already existed and for the users themselves (Estrada-Jiménez, et al., 2019). Amongst some of these new methods is Programmatic, the method we are studying for this research.

Programmatic campaigns run using platforms called DSP (Demand Side Platform), that allows advertisers, or they representatives, to buy advertising space online in real-time and to choose what publishers and where to buy it from (Alaimo, et al., 2018). It all happens in microseconds, where the advertiser is able to see the advertisement space that is available to buy using the DSP, and the platform will decide whether that space and the person who is now on that page are of interested to the advertiser.

Thanks to this technology, brands can use information that was aggregated from users online and their previous online behavior to later impact them with online advertisement. How does this work? Users will be categorized in different audiences depending on their navigation partner and the websites they have been visiting. So, if a person usually visits news site to read economy articles it will later be allocated to an audience with other users that have also showed interest in economy articles.

Brands can later use those audiences to target users they find are more in sync with their brands and whose interests are aligned with what they believe are their target population. They are then able to target the right audiences at the right time, to display their advertisements to users who will probably be interest in watching them.

It seems to be the best benefit of running Programmatic Campaigns, however it can also be a problem and can hurt the channel. Programmatic can lead to more personalized ads which can lead to users more interested in the message displayed, but it can also lead to suspicious from the users online that understand their information had to be known for them to receive such personalized ads (Samuel, et al., 2021).

With the increase of ads online, competition to gain the attention of the user has grown fierce, but also has led companies to be more aware that quality is more important than quantity. The more ads they display with no criteria, the more users will reject them and their competitors, so it's time to understand how advertisement online can be implemented in a better way. There is need to define better strategies and some best practices in order to achieve better performances and results from the digital campaigns, without harming the entire online advertisement industry (Wiktor, et al., 2021).

To understand how, this study analyzed the results of various digital campaigns, using different strategies and implementation settings. The aim is to conclude how programmatic can lead to better results for the advertisers, while avoiding more traditional methods that have led to the discomfort of many online users and that helped turn online advertisement a bad user experience throughout the years.

4.1. ONLINE USERS AND THEIR PERCEPTION OF DIGITAL ADVERTISEMENT

As we mentioned previously, studies have showed that the download of adblockers have increased, mainly due to the increase of online advertisement but also due to a gain of knowledge the online user is gaining. More and more users are becoming aware of these tools and used them to avoid being impacted by online advertisements (Redondo, et al., 2018).

In order to better understand the user's perception of online advertisement, we decided to conduct 11 interviews, to both users that have adblockers on their internet browsers and to users who don't and therefore still see ads frequently.

It is important to mentioned that even with an adblocker installed the user is still able to see certain ads, since adblockers have adapted their methods and now allow for certain websites do display their ads to users even if it is using an adblocker. Usually this comes with a certification and validation process from the adblockers side, to make sure the website is complying with certain requirement in order to be "whitelisted" by the adblocker.

To proceed with the qualitative research, different questions were written for Ad blocker and non-Ad blockers users, but still we kept a total number of 8 questions for each type of user. It is important to understand the perspective of each one of them, however without the questions being so different that we wouldn't be able to establish comparisons. The interviews were made on the duration of a week, and each would take between 10 and 30 minutes.

We interviewed 11 people, 5 Adblockers users and 6 that do not use it. For both types of users, we try to interview a diverse group of people so that we would not be limited to a specific gender or age group. This research tried to find someone from an older generation to answer the questions for Adblocker users, however every person approached with fifty or more years didn't use adblocker so we couldn't get any insights on that generation for adblockers.

For the results we investigated the answers in groups and aggregated them by theme. In summary, the questions were grouped in different approaches:

a) Understanding Behavior

i. Adblockers

1. How many hours per day are you usually online for personal use, besides to use social networks?
2. For how long have you been using Adblocker?
3. Why have you installed an Adblocker?

ii. Non-Adblockers

1. How many hours per day are you usually online for personal use, besides to use social networks?
2. Do you recall seeing online advertisement? How often did you saw ads online? Every time you use it or just occasionally?
3. Have you ever thought of using Adblocker? If yes, why not yes? If no, why?

b) Personalization

4. Would you prefer online ads if you felt they were useful information? So only see ads from brands and products that interest you?
5. Are you comfortable with sharing your online information so that brands know your interests and give you that relevant information?

c) Feelings towards Online Advertisement

6. Do you recall seeing the same ad over and over again? If yes, would you like the option of stopping the ad or showing again?
7. Do you recall seeing the ad of a brand that you dislike? Would like the possibility of blocking just those brands or products that you would prefer not to see?
8. Every time a service we use is for free, it usually means they make money out of publicity. So the price you pay to use the service is being willing to see a lot of ads. Do you still prefer that is free or would you prefer to pay a subscription and not see any more ads?

4.1.1. Understanding behavior

The first question was for us to understand if the users spend enough time online to justify them being interviewed. Also, it was important to understand if the users use internet to explore, read news and do some shopping, so the answer were focused on that and not on social media platforms and their ads.

From the interviews we realized that most users, adblocker or non-adblocker users, couldn't quickly perceive the number of hours they usually spend online, especially when we took out the social media platforms out of the equation, so they ended up mentioning an average daily hour per week. Besides the older user, all of them mentioned they spend usually more than 1 or 2 hours online per day.

Focusing on the Adblockers users, the second question looked to understand for how long they had been using adblockers on their computers, and all of them mentioned they had been using it for a long time. When then we proceed to the third question, about why they installed it, all stated it was to avoid advertisement online, and some mentioned the famous expression, pop-ups, which is a word to describe the ads that appear the moment we open a new page and it covers the entire screen, which doesn't allow the user to keep is navigation online until he closes the ad on a specific button. This helps us understand that all users using adblocker are doing it to avoid what they consider invasive advertisement.

From the 3rd question for adblocker users we proceeded to ask if they would be more interest in online advertisement if they felt they were more to their interest. We could understand that users who already have installed adblockers, and specifically that have it for a long time, are very advertisement intolerant, and are very skeptical to advertisement changing its ways so its not so intrusive anymore. Even with a promise of change from the online advertisement community, ad block users are not very keen in uninstalling them.

For the non-adblockers users the second question aimed to find out if users recall seeing advertisement online, which most answered positively to seeing them constantly and every day they are online. Following that question, it was important to then understand why they are not using adblocker, specially after most seemed so upset by the daily intrusiveness. Except for 2 users who weren't aware of these tools and their purpose, the other non-adblockers seemed to not feel that bothered by adverts to go to the trouble of downloading these tools. Some even mentioned that even though some are intrusive, they still prefer to see ads so they are always able to see something that might be to their interest.

4.1.2. Personalization

Therefore, we asked the fourth question, which was the same for adblockers users and non-adblocker users. We tried to understand if they would enjoy more advertisement if they felt it was to their liking. The answers were very consensual for these non-adblockers users. Most prefer to see adverts that are related to their interests and possibly something they might buy. We still have the skeptical ones that prefer not to see advertisement at all and that prefer to search for what they want by themselves. We see 2 non-adblocker users on this last behavior, both still in need to install adblocker due to the lack of knowledge on how to it.

For the proceeding of the interviews, all questions were equal for both adblocker and non-adblockers users. The fifth question tried to understand if users were comfortable with sharing their information online so that advertainment could be more personalized to their taste. We could see there was some division in the question, even amongst adblocker users, where some are comfortable with sharing their online information while others are very much against it.

We could presume this discomfort in sharing online information might come from misinformation on how it is later use, but some of the users who replied they are uncomfortable with sharing are aware that they are used for advertisement purposes and are even more settled on not sharing their info for that purpose. We could see that the users more advertisement averse are the ones who don't want to share their information, already knowing that is a mechanism brands find to persuade users to click and buy.

When we look to this same question but for non-adblockers users we can see that they are more comfortable with sharing information and even prefer brands to adapt their advertisements, so they are able to see more interesting content instead of ads that don't match their likes. We can gather from this if they are going to be impacted by ads anyway, they might as well see ads that have relevant content for them.

4.1.3. Feelings towards Online Advertisement

From there we tried to understand if users recall seeing the same ad many times or seeing ads from brands that they dislike and questioned them if they would like the possibility of blocking both those ads. The answer was positive to both 6th and 7th questions. All users recall these repetitive ads and even ads from brands they dislike or ads from products they will never buy from. All would love the possibility to block those specific, even those non-adblockers users who mentioned they wouldn't install because they don't mind seeing ads.

These two questions basically give us a big insight to how advertisement could be improved in the future, specially if they were to prevent more users installing adblockers in the future. Giving them the possibility to select and filter what they are finding interesting to what they are not would help the advertisement industry, especially the websites to regain more advertisement space and therefore increase their revenues.

This leads us to the final question, which was to make all users understand that the services they use online, such as content sites, news and e-commerce platforms, are free, which means that their method to generate revenue is through advertisement or else they would need to start asking for a subscription fee, as we have seen with certain news sites.

When asked if they would prefer to avoid advertisement by paying a subscription fee or just still navigate for free, most answered they would still prefer not to pay, both adblocker users and non-users. Even the most adverse user to publicity prefer not to pay and still see adverts instead of paying for the content they are consuming. We gather by this that for most of them the advertisement is a small price to pay for the free use of the web sites.

We still had a couple of users who mentioned that they would be willing to pay a small amount, as long as they felt it was a fair value for the content they would be consuming. For these users the option of paying a subscription seemed poor or appealing than seeing ads over all web pages while they are online.

We can conclude with this interviews that all users, adblockers and non-adblockers, have one thing in common which is the fact that none is actually a fan of online advertisement. Some have chosen to blocked them and others to tolerate it, or others simply are okay with seeing it so they can still find something new that might interest them, but they all find it quite annoying and badly done.

With this research we try to understand how online advertisement could be less intrusive and how we could make users even like it. So the focus should be how we can implement digital campaigns in order to achieve results for the brands and still be user friendly so we don't damage the online users navigation experience.

4.2. FREQUENCY AND RECENCY OPTIMIZATION

One of the main reasons online users are displeased with advertisement and with how it operates is due to the numerous times they are approached by the same ad, over and over again. More than seeing the same brand or product many times, users are realizing that they see the same creative more times than they can count, which can be a strong incentive to start using ad blockers (Ghose, et al., 2017).

The reason why users see this happening is because advertisers believe that repetition is the key to their success. Companies realized that by showing their brands and advertising more often, they will obtain better results, not only online but also offline. This has led to the "Ad Clutter" mentioned before. Every time a user visits a website or webpage online it will see so many ads from different advertisers, and sometimes sees the same ad with such frequency that it leads to the exhaustion of consumers.

Online campaigns can be implemented in a way that allows or blocks the number of times a user sees an ad. That option is called frequency cap, and when applied on the campaign level we are telling the platform that it is not allowed to present that specific campaign more than the number of times we defined to the same user.

Not only can the campaigns have a cap on the number of times the user is going to see the ad, it can also set how often it will see it. That option is called recency cap and determines the maximum number of times a user can see that specific ad on a certain time period. When setting a recency cap for the campaigns, advertisers can decide how often the users sees the campaign. It can be per minute, hour, day, week or month.

For this chapter of the study, we will try to understand if there is an optimized frequency strategy that can be settled on the beginning of the campaign, that can help brands obtain a better performance without getting to the point of being overbearing and leading to consumers and online users' aversion to the campaign and brand. As mentioned on the methodology level, we ran campaigns to test this feature and later evaluated the performance by looking into the groups of users that had seen the ad a certain number of times.

4.2.1. Repetition driving performance

When planning a campaign, the first question that a brand needs to ask itself is what the purpose of the communication is and what is it trying to achieve. The strategy and implementation of every campaign, either on online or offline channels, should be defined considering what it's main goal and what the campaign is trying to share with users, whether they are consumers, potential consumers or just users that we want to be aware of the brand.

A campaign can have a purpose of Brand Awareness, which means the goal is to spread the news of a new brand, new product or some sales that are coming. This means that the aim of the advertiser is that the message arrives to has many consumers as possible, to share the information. When talking about this type of campaigns the focus of advertisers is to reach as many users as possible, and in the online campaigns this is something that can actually be reported with some accuracy, opposite to what we see on the offline campaigns. Platforms such as DPS make it possible by enabling a metric called unique user, that identifies the user by their cookie ID and is able to understand how many times that same user has saw the ad.

However, when talking about planning a performance campaign, the reach is no longer important. Performance campaigns have a more focused goal. Has the name itself suggests, performance campaign's purpose is to lead the users to perform a certain action, usually on the advertiser's website, such as buying, remain some time on the website, visit certain pages, or to submit a form.

In order to do that, the advertiser is not so worried about reaching a lot of people, but rather the opposite. The campaign is focused on reaching the same person has many times has needed until that person has performed the action it is intended. Previous studies have showed that the more the users are exposed to the ad the more probability there is of them ending up converting (Burton, et al., 2019).

This study looked to confirm if this perception is true and if by increasing the number of times a user sees the same ad, it increases is willingness to convert. To understand this, we ran a campaign for a

Used Car E-commerce Platform for 3 months. The campaign was running with display creatives that promote their service, with the purpose of leading users to make a simulation for a car buying.

The platform used to run the campaign groups the results by number of times a user has watched the creative. So the users can belong to the group that saw the ad 1 time, 2 times, 3 to 6 times, 7 to 11 times or 12 to 20 times.

For the start of the campaign, we defined the maximum number of times a user should see the ad. It was set that the users should see a maximum of 20 times the creative. Even though we can decide the maximum number of times, we can't actually decide how many of them will see the ad more or less times. Due to the wide scale of the online inventory, it is impossible to determine if certain users will see an ad 3 times or 12 times, since we can never be sure if our ad will find that user once again in the future and for the duration of the campaign.

For that reason, it is important to understand the volume of clicks associated to users that saw the ad a certain amount of times, so first we started by analyzing the share of clicks that come from those different groups of users, to understand of the volume of users for each group and understand the performance of each of the groups when later mentioning conversions.

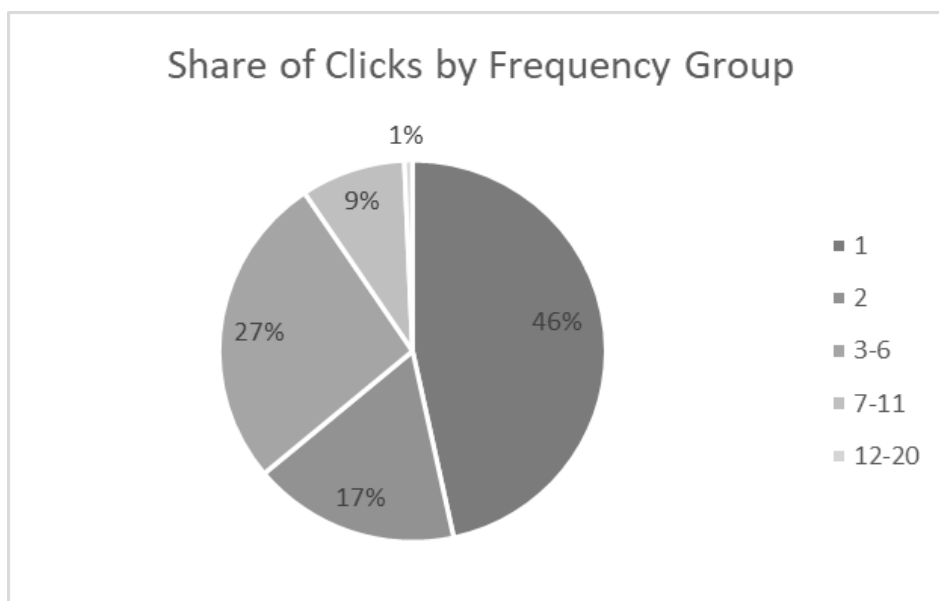


Figure 2 - Share of Clicks by Frequency for an Used Car E-Commerce Platform

Almost half of the clicks registered on the campaign were from users that had only seen the creative one time, which tells us that the campaign was not able to find the same user to show the ad more than 1 time. As mentioned before, with the scale of digital advertisement and the wide number of websites it is very difficult for an ad to find the same user more than once, especially if we are running campaigns with no audience or segment criteria.

Almost one third of the campaign registered clicks from users that saw the ad 3 to 6 times, and then we have 17% of the clicks from users that saw the ad twice, meaning that more than 90% of the users that clicked on the campaign had seen the ad a maximum number of 6 times.

As mentioned previously, due to the immensely vast environment of the online world, it is very difficult to find the same user many times online, and to prove that we can see that the group of clicks from users that saw the ad more than 12 times represented only 1% of the entire campaigns clicks.

This numbers might change depending on the type of strategy and campaign we are running. This campaign is a performance campaign with conversion goals, so the frequency cap applied was high, of 20 times, and the inventory used was of open market, meaning that we were running the campaign on all websites labeled safe within the Portuguese online landscape. With no limitation of inventory it makes it even harder to find the same user online, while if we were using only a smaller number of publishers and running a campaign in pre-selected site the chances to find the same user more than 12 times would be higher.

Now that we understand how the clicks were divided between the different frequency groups, we can move to understand if those clicks have led to actions from the users. In order to know that we built a report with conversion data by frequency group, to understand if any of these frequency groups have led to more conversions per click than the others.

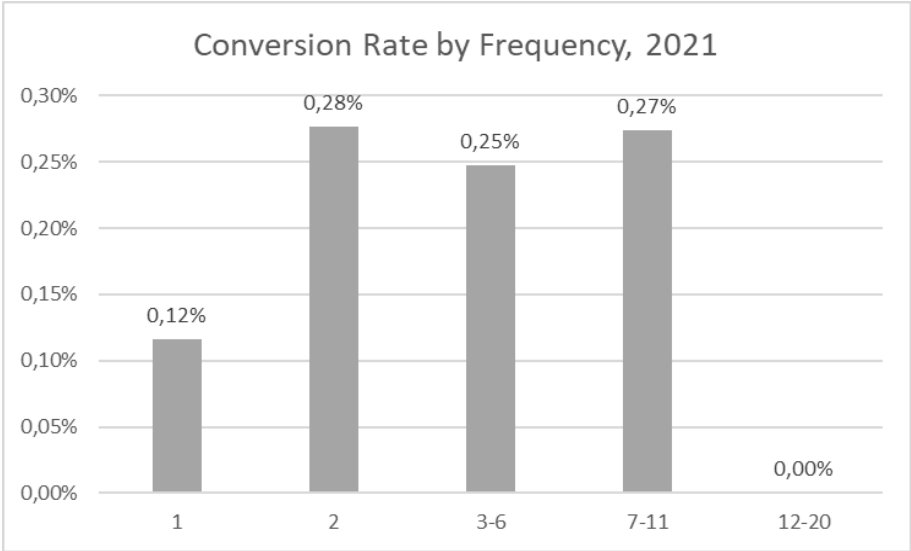


Figure 3 – Conversion Rate by Frequency for an Used Car E-Commerce Platform

The graph resumes the conversion rate each Frequency group was able to register, keeping in mind that the conversion in this case was the user completing a simulation. On a first glance, there are clearly two standing factors that we can see immediately.

First, that the users that saw the ad more than 12 times didn't convert at all. Not only did it present the lowest share of clicks amongst all of the frequency groups, but it also was the group that didn't led to any results for the campaign. This could be an insight for future campaigns. Maybe the frequency cap established could be of 12 in order to avoid spending budget delivering ads to users that we already know don't lead to conversions for the brand.

The second very clear factor is that the group of users that only saw the ad one time present a much lower conversion rate that the remaining groups, presenting a conversion rate half the value of any one of the other frequency groups.

This test helped us confirm what previous studies had already showed, that a user that sees the same ad more than 1 time has a better chance of converting than a user that only sees it one time. However, it is important to remember that, not only is it difficult to approach the same user online for more than 12 times, but their possibility to convert will be incredibly low and might not be worthy to spend the campaigns budget with impacting a user more than 12 times.

Most advertisers still decide to maintain a high frequency cap on performance campaigns, since they still prioritize results over avoiding disturbing the users (Todri, et al., 2020). The better results that frequency drives are not necessarily related to generated conversions, but to cost efficiency they achieve. Lowering the frequency cap of a campaign leads to less inventory, which means less offer on the market, therefore, by the law of demand and supply, they will see the price increase.

So, to avoid that increase on the cost of purchase, most advertisers prefer to still use high frequency caps. By doing do so they don't limit the inventory of advertising space they have at their disposal. This might mean they will deliver a small amount of budget to users that have very little probability to convert, but the cost benefit still prevails by using the high frequency caps, so much so that it makes those users a small price to pay.

The study also ran a second campaign so we could confirm if by using a different advertiser, from a different economy vector we would see different behaviors and therefore different results to the campaigns from the previous one focused on a automotive e-commerce platform.

For this second case we ran a campaign for a furnishing company that was promoting a new collection that had just been launched. The campaign ran for a month and aimed to lead users to buy one item or more from their new collection. We applied a frequency capping of 20 times per user so we wouldn't present the campaign more than 20 times to each user.

For this campaign the goal was to generate sales, so a conversion was registered every time a user added an item to their online shopping car or even finalized it and confirmed a purchase.

First, we analyzed the share of clicks by numbers of time the users had seen the campaign.

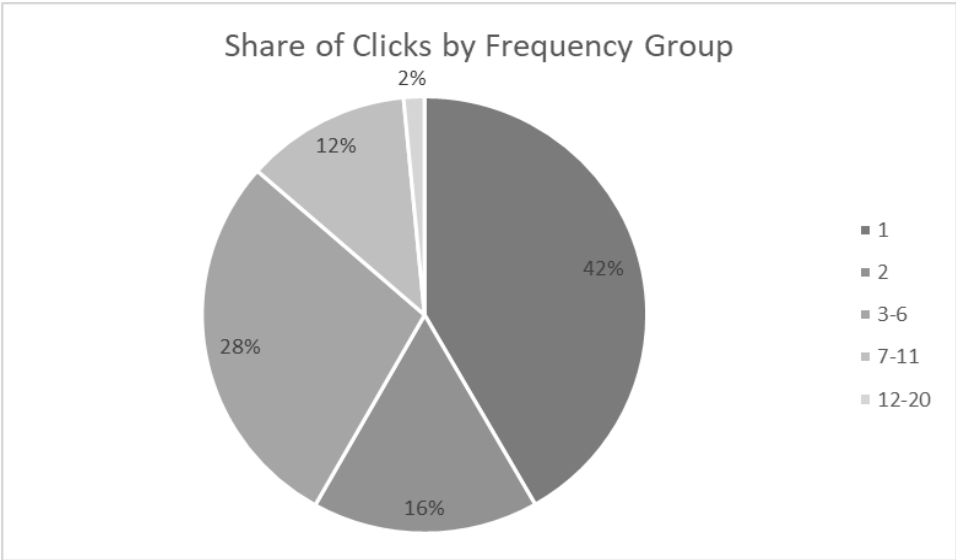


Figure 4 - Share of Clicks by Frequency for a Furnishing Company

Even though we are analyzing different industries and we are evaluating different types of products being publicized, we can see a very similar behavior. Almost half of the users that clicked on the campaign had seen the campaign only once. And if we look to the share of users that clicks while seeing the ad up to 6 times than we are talking of almost 90% of the clicks of the campaign.

Once again, the percentage of users that clicked on the campaign and had seen it more than 7 times is very small when compared to the users that saw it less than 6 times. Users that clicked and saw the ad more than 7 times are not getting to even 15% of the total share of the clicks. This helps us confirm that it is not a matter of type of product, but that it is very difficult to find the same user repeatedly online. The probability of finding the very same user for a 7th time or more is indeed very reduced.

After confirming that the share of users that clicked is high on users who saw the ad less than 6 times, is time to understand if the clicks have led to conversions and therefore were of interested to the campaign's strategy and for the advertiser's goal.

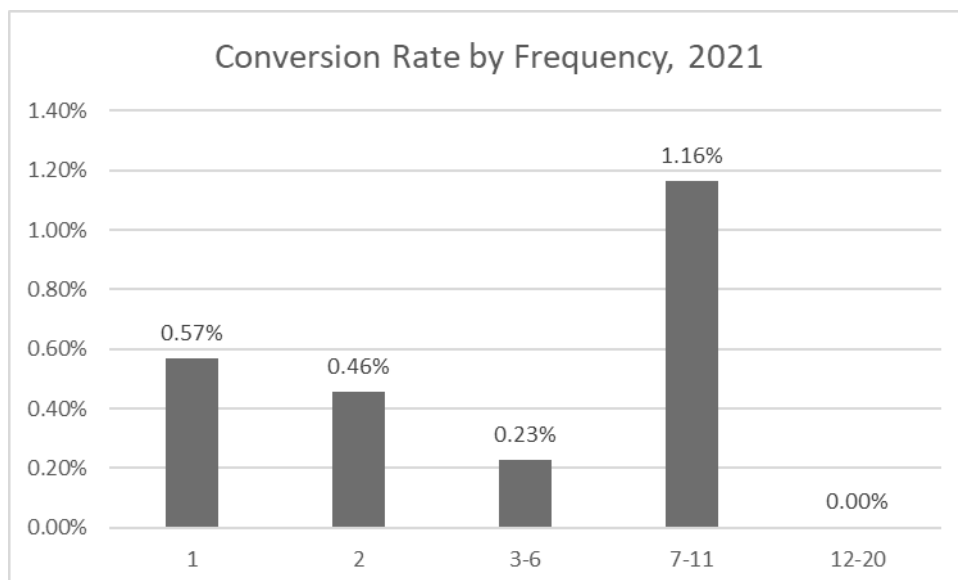


Figure 5 - Conversion Rate by Frequency for a Furnishing Company

This is where we start seeing a difference in behaviour between campaigns, which might or not be justified by the difference in vector and product, but still is possible to find a partner between the two of them.

On the previous campaigns the higher conversions rate was on users that had seen the campaign 2 times, followed right behind by users who had seen it between 7 and 11 times. Contrary to the previous studied campaign, on this new test we can clearly see that users who have seen the campaign between 7 and 11 times have converted much more than any other users, even if the share of users that click was small as seen previously.

It is interesting to see how users that saw the campaign only once where the second higher converters, but still only manage a conversion rate half the value of the one from users between 7 and 11 times. It is also interesting to see how the conversion rate is lower for those who saw it twice

and even lower when they saw it between 3 and 6 times, but then explodes when users saw more than 7 times.

Once again users that have seen it more than 11 times mostly don't click on the campaign and no conversions were registered from those users.

For this campaign is easy to understand that the ideal is to set a higher cap so there is a big chance to impact users more than 7 times, which seem to be the one who are keener to convert and purchase furnisher. This can be a very helpful insight for the brand and the agency running the campaigns, so probably future campaigns should keep the frequency cap higher to reach users more than 7 times and therefore lead to more conversions.

4.2.2. Test, learn and adapt

We can conclude from these two tests that there is no right frequency for every campaign and therefore the idea of using the same settings for all campaigns is unrealistic. It is important to understand the campaign, the brand and product we are promoting and what strategy can work better for each type of campaign.

There are no unique recipes, so it is important to understand what we are trying to communicate and achieve with each campaign. A pre-analysis is always important to make sure we set the right features on a campaign, but it does not ensure optimal results.

The first time we run a campaign for a certain advertisement or even for each of their different products, is normal to not be sure of what features to use, specially what frequency cap to apply, since we are not sure of how the users will behave, so the best procedure is to start with a higher frequency cap, and once we ran the first campaign we are then able to understand which group of users is performing best, and we can adapt and adjust those settings on following campaigns so we improve future performances.

This not only applies to frequency settings, but to most settings we are able to apply on programmatic campaigns, such as devices on which the campaign can run on, geographic areas, web sites and lastly but not least, audiences.

On digital campaigns test, learning and after being able to adapt and redefine features is very important, since this is an environment that is always changing. We need to be able to study campaigns with a clinical detail and understand which features are relevant to maintain and which ones are critical we change to increase performance from campaign to campaign.

Depending on the features this is possible to be done not only from campaign to campaign, but even on an on-going campaign. It is important to keep track of a campaigns performance while still running, so we can adapt and change any features, to enhance the ones we can see are leading to better results and maybe pause the ones we noticed are harming the campaigns results.

This is still only possible to do on campaigns running in the digital channel. Most channels such as TV, Radio or outdoors banners are impossible to adapt or make alterations once the campaigns are already live, but with digital we can always go back and change certain features, and even change the creatives and copy of the advertisements running. This flexibility is one of the main factors that has helped its adoption on the last decade and the higher budgets being allocated year after year.

4.3. THE POWER OF DATA AND KNOWLEDGE

The main topic we want to understand with this thesis is the use of online data to understand the users we find online and if the use of that data being used to personalize the adverts, we show to each user can lead to better campaign results.

This is possible to do by using the Programmatic method, an online advertisement method already in use. We decided to run some test campaigns to understand how the use of online data can increase the performance of a campaign. For each test the performance of the campaign could be evaluated in a different matter so we will study the tests by strategy and type of audience.

It is important to explain that not all data is created equally. We need to understand how audiences are aggregated and how data can be categorized on the online world. Data, depending on its origin and who is the intervenient that is using her, might fall in one of these 3 labels:

- First-party data is data that the company collects directly or first-hand from the consumer. These are audiences that belong to the advertisers themselves. Usually, audiences that were collected from their website, or from their own client data base. Because this is data owned by the company, it's a very valuable source of data, and so the advertiser is able to interact more accurately with them. This data from the users is collected and then processed on a what we call Data Management Platform.
- Second-party data is a similar type of audience, but instead of being collected by the advertiser, the advertisers actually purchases it from a second intervenient, such as their own media agency or a data provider. The data is purchased from a trusted partner, which means the advertiser knows they can trust the quality of the data. Usually, advertisers use this audiences when looking to target prospecting users with their campaigns.
- Third-party data is any data collected by a business with no direct link to the user that is within the audience. Usually, an advertiser uses audiences that have been compiled by some Data Aggregated company, such as independent researchers that collect data from surveys, interviews, and feedback forms to gather information. Because the data is collected directly from a customer, companies tend to find this data less reliable or valuable than first and second-party data.

The campaigns we will see on the following test used different types of audiences, but all fall within the first and second-party data.

For the second-party data audiences, the source was the DSP itself that allows the advertiser to use their audiences at no extra cost. The audiences aggregate users of similar interest or purchase intention in various categories and sub-categories. Also, it provides demographic audiences that are collected considering the information the users were willing to share.

For the first-party audiences, they are audiences from the brand itself, created using data from the website visits, so audiences of users who have visited certain pages or performed certain actions. There are also first-party data which is data from the brands own information of their clients, called CRM data.

CRM stands for Customer Relationship Management and is all the companies actions related to data that they have collected from their customers, such as names, email and date of birth. It's the most valuable data a company can have, so loyalty programs have had a growth over the past years, so companies can have a way of collecting their customers data.

All these audiences have shown different levels of performance when applied on a campaign, so we decided with this study to explore their efficiency and understand what types of audiences can lead to better campaign results.

4.3.1. Broad or Interest

The first hypothesis we wanted to analyze was how campaigns that target users by their interest present better performances than campaigns running for broad audiences. In order to do that we ran an A/B test, where both campaigns used the same creatives and messages, but one ran with no criteria, and the second one aimed to impact users from audiences related to the advertisers target population.

The advertiser is a green energy related business and was promoting the new offers of green house energy. With that in mind it was decided to communicate to users within the interests of green living and environment oriented. Below we can see the final data for both campaigns.

Campaign	Impressions	Clicks	30s	CR 30s	60s	CR 60s	Click to Call	CR Click to Call
Broad Reach	22 228 143	22 374	1223	5%	771	3%	35	0,16%
Interest	2 559 665	2 420	441	18%	295	12%	11	0,45%
Grand Total	24 787 808	24 794	1664	7%	1066	4%	46	0,19%

Table 1 – First Test, Broad Reach versus Interest, Ad server Data

First, it is important to understand the source of the data collected. The campaigns in programmatic usually run in two different platforms, the ad server and the DSP, Demand Side Platform. The demand side platform communicates directly with the publishers, so when they send a request for an ad, it's the DSP that answers it and defines which ad is better suited for that type of ad request. Once the DSP determines which ad to serve, it requests the creative from the ad server, so that an image is showed to the user navigating on the publisher's site.

The ad server also hosts the conversions data, so the pixels that are firing on the consumers web site to detect conversions are also hosted on the ad server. That way we are able to collect most of the campaigns data on one unique platform, and that is why usually an online campaign is reported using ad server data.

Secondly, is also relevant to know what each one of the metrics stands for. When we talk about impressions, we are referring to the moment the creative of the advert is downloaded on the publishers' web page. This doesn't necessarily mean that the user has seen it, because the creative can be on the lower part of the page and the user hasn't scroll down, but as long as the creative is downloaded on the page, the advertiser will need to pay that space to the web site.

When we talk about clicks, we refer to the moment the consumer has interacted with the creative and we expect it to be redirected to the advertisers landing page, which is usually within the advertisers' web site, but can also be their App or even one of their Social Networks profile.

For the purpose of this campaign, we were also tracking conversions, so a conversion would fire on the advertisers' website every time a user that came from the campaign would remain at least 30 seconds. Another conversion would fire if the user remained for at least 60 seconds on the website. Lastly, one more conversion would fire if the user completed all the step necessary to request a call from the advertiser.

Has expected the broad campaign was able to deliver more impressions due to the lack of restriction, while the interest one has a narrower pool of users to approach. When we use interests, we are delimiting the number of users we mean to approach, by stating that we only intent to reach users with interest on certain topics or users with certain demographic characteristics. For this campaign we were looking to impact users who had showed interest in green living and sustainability, versus users with no criteria, so the pool of users to reach is very despair from Broad Reach to Interest.

In order to understand what line presented the better performance, we decided to look to the conversions each one has generated, by comparing the conversion rate between them.

We can see that the interest campaign was able to generate more conversions for each click registered. We can see that 18% of the clicks lead to visits to the web site with more than 30 seconds, and 12% with more than 60 seconds. If we compare with the brad campaign only 5% of the clicks were able to generate 30 seconds visits and 3% more than 60 seconds one. The goal of the campaign, besides communicating their new offer and getting new web site visitors, was to get consumers to request their only product and to register online to get more information. We can see that the interest campaign had a conversion rate of 0,45%, while the broad was only able to reach a 0,16% conversion rate.

Besides the campaign data which comes directly from the ad server, platform where the campaigns creatives are hosted, we were also able to read information directly from the advertisers web site, using a platform that has the ability to read all the users behavior within the website, and also detect their origin when coming to the website, so it is able to understand if the user came from an organic search on a search engine, or if it came from an adverts, and specifically from what advert is has come from.

The table below presents the traffic data to the web site, so we can understand how the different strategies lead to different user behaviors within the website. The platform is able to read if the users have clicked on the broad or interest campaign, so that we are able to know which users had come from one or the other.

Campaign	Users	Bounce Rate	Pages / Session	Avg. Session Duration
Broad	1 767	64,73%	1,46	39,71
Interest	279	41,16%	1,75	81,89
Total	2 046	61,41%	1,50	45,65

Table 2 – First Test, Broad Reach versus Interest, Analytics Data

We can see that even though broad was able to generate more visits to the web site, especially due to the biggest quantity of clicks, Interest was the one that lead to sessions longer than 80 seconds and with a bigger average of pages visited. It was also the strategy with the lowest bounce rate. Bounce rate is the amount of users that left the site without taking any action from all the users that visited, meaning that Broad was the one generating more visits that lead to an immediate drop out from the site.

From this campaign analysis we could conclude that the use of segments has benefit the campaign. The use of audience data was capable of generating better results than the line running with no segments. However, even though this campaign has proven this point, this might not always be true. For this campaign, that was promoting green energy solutions, we aimed to impact users who were interested in green living and sustainability, but maybe we wouldn't see a better result if the users impacted were interest in automotive. It is important to know what we are promoting and who we want to promote it to.

4.3.2. The importance of knowing your audience and their interests

Applying Audience data over the campaign with no filter or previously trying to understand the products and advertisers target won't lead to guaranteed better results. So, it is also important to understand the product or service we are promoting, and then understand the audience and who we are about to communicate to.

With that in mind, we ran a campaign with the goal to confirm if different target populations could have different performances and if there was audiences that worked better than others for the campaign we were communicating for.

For this test the brand was an insurance company looking to communicate their health insurance product. Audiences were chosen to fit each creative theme we were running on the campaign. For the Sports creative we reached people with interest in sport in general and who were also interested in specific selected sports. For the gadgets creative we chose to impact people with interests in computers, new technology and video games. For the seniors creative, we looked for online users with age over 65 and that had showed interest in literature, family, and cooking. For the last creative theme, Yoga, we searched for users with interest in healthy food, vegan and vegetarian diets, and healthy living.

Personas	Impressions	Clicks	CTR %	Conversions	Conversion Rate
Sport	551 027	647	0,12%	47	7,26%
Gadgets	527 019	529	0,10%	56	10,59%
Senior	548 908	499	0,09%	51	10,22%
Yoga	584 552	570	0,10%	69	12,11%
Total	2 211 506	2245	0,10%	223	9,93%

Table 3 – Second Test, Personas Comparison, Ad server Data

Once again, we evaluate the campaigns results by considering data from the ad server platform, so we were able to register impressions, clicks and conversion data for this campaign. For this campaign

we tough is was important to look to the CTR (click through rate), which is the ratio between the number of clicks and the number if impressions.

Looking to the campaigns results, we can tell that even though the sports theme had the biggest click through rate, it was the one with the lowest conversion rate, meaning that even though the users seemed keen on interacting with the creative once they saw it, their interest would diminish until they reached the converting moment. For this campaign, a conversion was registered every time a user would conclude a simulation and request a contact from the insurance company.

Since all the lines used interests, we aimed to distribute the budget for all of them equally, so we could have the same base of comparison between audience groups. So all of the campaigns had around 500 000 impressions registered, but still we can see some different values amongst them since once again is difficult to reach the exact same number of users when using different audiences.

Evaluating the campaign performance by looking into the conversions rate, it is possible to understand easily that the Yoga audience has led to a better performance, with a conversion rate of 12%. Gadgets and Senior came after, both with a conversion rate around 10%.

If we go back a little and evaluate the product we are promoting, we can understand that the interests chosen for the Yoga persona are the more similar and would be more in sync with a health insurance, which explains why it was the theme with better performance and that led to a bigger conversion rate.

We ran a second campaign, for a Coffee brand that aimed to promote their sustainable coffee initiatives. For this campaign it was defined two different personas:

- The Ecologic Conscious Coffee Lover, which age is between 25 and 45 years old, they are Coffee Shop Regulars, and are interest in Coffee and Espresso Machines and Accessories. Besides being coffee fans, they were also Green Living Enthusiasts.
- The Trendy Coffee Explorers, with ages ranging between 18 and 35 years old, are also Coffee Shop Regulars, and are interest in Coffee and Espresso Machines and Accessories. Besides the age they differ from the Ecologic personas by being interest in technology or photography.

Segments	Impressions	Clicks	CTR	Conversions	Conversion Rate
Ecologic Coffee	142 567	238	0,17%	59	24,79%
Trendy Coffee	167 660	188	0,11%	24	12,77%
Total	310 227	426	0,14%	83	19,48%

Table 4 – Third Test, Personas Comparison, DSP Data

For this campaign we would consider a conversion every time a user added a product to the online shopping cart at the advertiser’s web site. Both personas had the same amount of investment to have the same amount of data to analyze, however the trendy coffee persona was able to reach more users than the Ecologic one.

Looking at the results of the campaign, we can see that the Ecologic persona presents a better result, not only due to the bigger click through rate, but also due to the highest conversion rate, showing

that from 100 clicks, almost 25 led to a user adding a product to the shopping cart. Comparing the conversion rates between personas, we can see that the Ecological resulted on a conversion rate twice bigger than the Trendy Coffee personas.

Once again, if we pay close attention to the campaigns purpose, which was to promote the sustainability of their coffee, it makes sense that the Ecological audience was the one to lead to a better result. The main difference between the personas impacted was that the Ecological ones were Green Living Enthusiasts, meaning that they were users that have presented navigation partners that categorizes them as people concern with green living and sustainability, which is closely connected with what the campaign was promoting.

From these two tests we can confirm that it is important to understand the advertiser and their brand, the product or service they are promoting and to what audience this information is more relevant to. Using audience is important but if we do so with no attention to whom we should be talking to then there is no point in using it.

But not only it is important to understand your target population, it is also relevant to understand the audience's origin and how it is collected and polished before used.

4.3.3. Types of Audience

Besides knowing the brands, their products and services, and even the target population, it is also important to know the types of audiences available to use and how those audiences are collected, crafted and polished, so brands are able to reach users who have a higher probability of converting and helping the brand achieve their campaigns goals.

When talking about audiences, not only can they be categorized by source, but they can also be categorized by the way their users are collected and how they are actually built. Audiences can be referred as different types:

- Contextual: audiences built according to websites content, instead of user's behavior. So before every campaign the brands define certain keywords or page categories where they would like to see the campaign running, and we create a specific segment to run the campaign over domains and web site pages that belong to those categories or have those keywords within them.
- Interest: audiences created with users who have previously shown interest on certain topics or products, according to their internet navigation history. But not just any user becomes a part of an interest audience. The algorithm works based on average visits, so if a certain topic has, for example, an average of 3 visit pages from users, only those who have visited that topic more than 3 times will be considered interested in it.
- Retargeting: audiences created by collecting users that have visited a certain page or performed a certain action on the website. Has the name itself states, the brands are looking to purely retarget users who have already been in touch with them.
- Look-a-Like: created usually from a retargeting audience. These audiences are built from other audiences, that we call seed audience, and we look for users that present similar

partners or interests, but that are not on the seed audience. So basically, we are amplifying the seed audience by searching for users who look similar but haven't just that one characteristic from the seed in common.

After understanding these types of audiences listed above, the study tried to understand if there were different performance associated to each one of them, so we can conclude what type is more capable of generating results for the campaigns.

In order to study the types of audiences, we ran a campaign for an automotive advertiser, promoting a car line using 3 different audience types.

1. Contextual, in this case we were delivering the campaign in web sites related to the automotive sector and showing the ad on those pages to users who were reading at that moment.
2. Interest, trying to deliver to users who have been showing interest in cars and other automotive vehicles.
3. Look-a-like, where we used a seed segment from the website and searched for users with similar navigation partner, expecting them to convert as well as users who have visited the website.

The campaigns conversions were registered every time a user visited a specific car model page on the advertiser's web site.

Audiences	Impressions	Clicks	CTR %	CPA	Conversions	Conversion Rate
Contextual	2 003 797	3 169	0,16%	2,75 €	806	25,43%
Interest	153 815 744	183 225	0,12%	2,98 €	42 887	23,41%
Look-a-Like	27 643 720	32 808	0,12%	4,38 €	5246	15,99%
Total	196 337 446	232 859	0,12%	3,16 €	51 451	22,10%

Table 5 - Fourth Test, Type of Audience Comparison, DSP Data

So, for this automotive advertiser, we ran a campaign using those 3 types of strategy, and even though the intention was to deliver the same amount equally between them, the nature of each one of them didn't make it possible. The Contextual strategy consist on the selection of sites according to their context, which might limit the inventory and in this case it limited a lot when compared to Interest and the even when compared to the Look-a-like strategy. The Look-a-like strategy is built from a retargeting one, so it's expected to also have a delivery lower than any interest strategy.

Despite its lower delivery, Contextual was the one to present the best CTR and also the best conversion rate, followed by the Interest strategy with a conversion rate just a couple of percentage lower. The look-a-like one had the lowest performance, with only 16% of conversion rate.

As mentioned, look-a-like audiences are usually created from retargeting seeds, so we will try to understand if these types of audiences present good performances when compared to others on digital campaigns.

4.3.4. Retargeting

Most brands choose to use Retargeting strategy when advertising online, which is the possibility of showing ads to users who have been previously on the brands website, a certain page or group of pages, or even did a specific action that the advertiser would like to chase after.

Retargeting strategy is mostly used with the goal to increase conversions, whether it's sales or a request for contact (Rodrigues, et al., 2019). It can also be used to promote a product in stages, so if a user has already visited a certain page and has already part of the information, then we can retarget that user with an advertisement that complements with more information on the product or company.

The advantage of using Retargeting is to approach users that have before express interest on the brand itself or even a specific product, meaning that they are more willing to perform our final conversion (Sahni, et al., 2019).

On this next test we were running a campaign for a Decor and Furnishing company, promoting their many products. The campaign had two different approaches:

1. Prospecting, which aimed to approach users that had never been on the advertiser's website, so we exclude the audience of users that had visited on the last 30 days.
2. Retargeting, which aimed to only approach users that visited the advertiser's website on the last 30 days.

For this campaign the main goal was to drive conversions. A conversion would be registered every time a user added a product to the online shopping cart or if they finalized the buy.

Strategy	Impressions	Clicks	CTR%	Purchases	CPA €	Conversion Rate
Prospecting	17 498 023	40 901	0,23%	2 581	13,33 €	6,31%
Retargeting	5 955 273	23 091	0,39%	10 777	1,78 €	46,67%
Total	23 453 296	63 992	0,27%	13 358	4,01 €	20,87%

Table 6 – Fifth Test, Prospecting Versus Retargeting, Ad server Data

The distribution of impressions is easily understandable, since on the prospecting one we were targeting a broad population, just excluding previous visitors to this advertiser's website, while on the retargeting one we are only searching for users who have actually been on the website.

We can clearly see that Retargeting has led to the best performance, not only regarding CTR but also regarding CPA, which was of 1.78€ in Retargeting and of 13.33€ on Prospecting, meaning the Retargeting CPA was 87% lower than the Prospecting one.

With a conversion rate of almost 50%, the Retargeting strategy proves that if we look for users that have previously showed interest in our brand or product we can get better results than to approach users that have not showed any connection or interest to our brand.

However, it is important to understand that retargeting just by itself might not be smart planning, since the pool of users we can impact is low and that means higher costs. It is important to match

retargeting with a broad campaign that can help “feed” the retargeting strategy. Meaning, that if we are looking to impact users that have been on the website, we first need to run campaigns that lead users to the web site.

4.3.5. A final look to Audiences

After analyzing the result of the many tests ran on previous campaigns, we can see those over comparisons of 2 types of audiences, or even 3, there are certain audience types that clearly present better performances.

In order to understand how different audiences can lead to different results, we ran a campaign from a Bank company, promoting their House Credit product, where the conversion tracked was a simulation of the product.

For this campaign we ran 4 different strategies:

1. Interest, segmented to users with interest in Finance and Business;
2. Broad, no criteria was defined so any user could see the advertisement;
3. Look-a-Like, looking for users that have a similar partner to users that had visited the web site product page on the last 30 days;
4. Retargeting, impacting users who had visited the product page.

Audience	Impressions	Clicks	CTR %	Conversions	CPA	Conversion Rate
Interest	14 937 700	24 346	0,16%	950	17,94 €	3,90%
Broad	11 898 072	23 275	0,20%	680	23,96 €	2,92%
Look-A-Like	3 026 274	4 997	0,17%	275	12,72 €	5,50%
Retargeting	23 848	43	0,18%	216	0,14 €	502,33%
Total	29 885 894	5 2661	0,18%	2 121	17,38 €	4,03%

Table 7 – Sixth Test, Audience Strategy Comparison, Ad server Data

If on previous tests we had proven the best performance when comparing two types of strategy, or even 3 types, but for this one we decided to compare the performance of 4 types of strategy. In this one we can clearly see the hierarchy of better performance amongst the 4 main strategies used in programmatic campaigns.

Looking to the results, Broad was the one that, even though presented the higher CTR, was the one with the lowest conversion rate, and consequently had the higher cost per conversion.

The second worst performance came from the Interest strategy, with a CPA of 17,94€, followed by the Look-a-like strategy with a CPA of 12,72€. This shows that if we look for partners within users that have showed interest on the product, we are more closer to achieve better results than just looking for users interest in certain themes that we believe are inline with the product.

Lastly, we can once again confirm that Retargeting is the strategy with the best performance, presenting a final CPA of 0.14€. The delivery in this type of strategy is usually lower due to the small

dimension of the audiences but still it is important to apply this strategy when the goal of the campaign is conversions, especially lower funnel ones. By lower funnel conversions we mean the conversions that are closer to the final purchase.

5. CONCLUSIONS

The aim of this research was to understand how digital advertisement can have a positive impact for brands and help them generate revenue, while helping online publishers maintain their revenue in the midst of trends such as the rise of adblockers and the unpopularity of ads amongst online users in Portugal.

The study started by trying to understand how online users perceived digital advertisement by conducting in-depth interviews on a qualitative research approach. With this research we were able to approach both adblockers and non-adblockers users from both genders and different ages.

We could conclude that most interviews prove users are tired of advertisement online, with adblockers users showing a bigger aversion to them even though they have been avoiding it for quite some years and might not be aware of the actual digital advertisement state.

From the interviews we could conclude one main insight, that even though users are not keen on seeing advertisement online, they still preferred to consume content online for free instead of paying a fee and be ad free.

From previous studies and research, we could gather that one of the biggest reasons for users' aversion is the clustering of ads online. When asked about recalling seeing the same ad many times all users confirmed they have.

For that reason, we started the Conclusive Research by analyzing the frequency feature on digital campaigns. By establishing a maximum number of times the user can see a certain ad we are avoiding approaching the same user so many times that it might lead them to hate the brands instead of liking it and buying from it.

From the campaigns ran we could conclude that there is no right recipe for every situation, but instead advertisers should focus on understanding their own brands and products, test, learn and adapt their features, so users respond positively to their communications. Some creatives might be so appealing that they might need little repetition in order to grab the users attention, to a point when they might become annoying from trying too hard. Others, might be more subtle and a little more impact might help to be remembered.

It is important to understand the product or service the advertisers are communicating and make sure to adapt these settings along the campaign and establish a rule for future campaigns so there are promoted as they should.

We then moved to the conclusive research and analyze a group of campaigns to understand how the use of audiences and different types of them could influence a campaigns performance.

From this analysis we concluded that the use of audience just for itself is already a trigger of results for campaigns, when compared to campaigns running with no audiences at all. The use of audiences that are connected to interest that the prospecting consumers of a certain brand might help to achieve better goals.

This might however have some exceptions, specially if we are talking about brands that are focused on a broader communication, so to lead to brand awareness instead of leading to users to the site or to do a certain conversion. If the goal is just to spread a message to has many users as possible than broad is a better strategy than using audiences.

When using audiences, advertisers should plan and analyze their consumers so they can use the right audiences for the right campaigns. Advertisers have a big number of audiences and interests to choose from when preparing a communication.

We were able to prove this point by analyzing the results of two different campaigns that used different audiences to create personas and approach different groups of users with specific creatives. We could see that there were personas that lead to better performances that others, and it was clear to see that those personas were using interests that were more closely connected to the product or service being promoted.

Besides taking into consideration the many interest available to use online and impact, there is also many types of audiences at our disposal. We can approach users online by their interest, depending on what their navigation history shows us, but also we can impact users who have visited or performed certain actions online, we can displayed ads on specific pages that are categorized in a certain theme we want to be associated with, and many more.

The type of audience to use will depend on the purpose of the campaign and the goal the brand intends to achieve with it. For that reason, it is so important to plan carefully before activating a campaign using data in the digital channels.

From the analysis and campaigns ran to test types of audience it was easy to understand that the most effective type of audience is retargeting, so searching for users that have already performed a certain action. If we impact a user that has already added a product to a basket online but hasn't finish the purchase, the chance that he will finally convert is much higher than a user who hasn't even visited the brand website even though he might have interest on the brands category.

Contextual audiences, so to show the ads on pages that share a certain thematic we are trying to be associated with, have proven to also have quite the good performance, however the inventory available is quite limited, and makes it difficult to guarantee a campaigns delivery.

Another popular type of audience is the look-a-likes, so to look for users that have showed a similar partner online to users that are already our clients. This type of audience needs to be very well built, in order for it to show a good performance. The focus of this type of campaign is to use a seed audience, so a group of users that performed the action we consider the goal and try to find users that have similar partner but haven't perform that exact action. The dimension of this audience might variate depending on who is creating it. If the creator is looking for a bigger audience, then he might amplify the reach but that means the audience will have less affinity to the original seed audience, which might compromise the performance.

Look-a-likes are very popular but is very important to have an audience planner specialist helping to build them, because it is easy to get greedy and increase the dimension of the audience, forgetting the affinity and lead to a worse performance by the end of the campaign.

We can conclude from this Study that it is very important consider the environment we are communicating in, and make sure we are not just creating more noise in an environment already very crowded. It is extremely important to plan and understand what we will communicate, how, when and to who. Without those campaigns are easily a cost and not an investment that can bring return to the brand.

The use of data on digital campaigns is reachable to all brands, even those who don't have their own data. It is easier to purchase audiences from 2nd and 3rd party members that can help increase a campaigns performance and with little or no cost associated.

6. LIMITATIONS AND RECOMMENDATIONS FOR FUTURE WORKS

The research focused on a more qualitative approach to understand how internet users perceived the digital campaigns and the use of online data to approach them. This allowed the research to focus better on the characteristics that generate positive and negative reactions from the users, and so it allowed to study them through the use of live campaigns.

Through the use of interviews we were able to understand users in a more profound and detailed view, even though we didn't get a chance to collect a big sample of data and therefore understand how that sample could represent the population in study.

On focusing on a more qualitative approach, the research didn't benefit from a more quantitative one, even though it would be enriching for the study to understand the dimension of adblockers users in the Portuguese Population and what drives them to download it.

Another limitation of the research is a future threat that we didn't took enough time to understand how it can impact the industry. Due to the new regulations on European Union, the use of cookies will be ceased in the near future, which will complicate or even impend the use of audiences, especially the ones from 2nd and 3rd party origins.

With that said, we recommend for future studies to approach this topic with more quantitative research and perform a survey amongst Portuguese internet users to understand the penetration of adblockers on the Portuguese market. Not only to have a perception of the percentage of users using adblockers online against the non-users, but also to understand their reasons and motivations, so we can conclude some patterns between them.

We also recommend a deep study on the influence the end of Cookies will have on digital campaigns, and mainly on the programmatic buying method. Is it important to understand how this will influence the way brands plan campaigns and what other options are there to substitute the use of audiences collected by cookies data.

Some participants on the digital channel are already preparing for the end of cookies in users browser, and so they have been study methods to collect data from users using different technologies that might enable to also create and construct audiences to later use has targeting on marketing campaigns.

Contextual audiences are one of the most popular answers to this predicament, so it would be interesting for future research to focus on a more detailed study over this type of audiences. The fact that they do not depend on any users information but instead are focused on the environment in which the advertisement will appear at the moment allows it to benefit from a very independent creation.

In order to create contextual audiences, the brand needs to define in which page categories it would like to appear associated with. To do that the brand can define categories to which they would like to appear next to, selecting pages that are categorized online, or by defining specific words and expressions. This last method can lead to a more granular use of the contextual audiences, in a way that brands can appear next to pages and content very niche and close to their interests. When

defining the words, the advertisers can also decide if they want to find them on the pages content or just the URL.

We would suggest a more profound analysis focused on the different methods we can construct a contextual audience, to understand which method can craft the best audience and then lead to better results from the campaigns. Depending on the method used the audience can be relevant to the users, or it can also have a bigger or smaller dimension that can hurt the campaigns delivery and the brands reach.

The method should be similar to the one we used for this research. We would advise the future study focused on running some campaigns, where the only variable would be the different contextual audiences, constructed from different methods.

7. BIBLIOGRAPHY

- Bassiouni, D. H., & Hackley, C. (2014). 'Generation Z' children's adaptation to digital consumer culture: A critical literature review. *Journal of Customer Behaviour*, 13(2), 113-133.
- Gutfreund, J. (2016). Move over, Millennials: Generation Z is changing the consumer landscape. *Journal of Brand Strategy*, 5(3), 245-249.
- Pereira, T. V. (2020). New insights on the importance of real-time marketing on building brand engagement and brand equity (Doctoral dissertation).
- Ilyas, N. A., & Nayan, S. M. (2020). Advertisement for growing business. *Journal of Undergraduate Social Science and Technology*, 2(2).
- Kotras, B. (2020). Mass personalization: Predictive marketing algorithms and the reshaping of consumer knowledge. *Big Data & Society*, 7(2), 2053951720951581.
- Salonen, V. (2021). Personalized Marketing at the Right Time: Toward Motivation-Based Temporal Dynamics in Web Personalization. JYU dissertations.
- Babet, A. (2020). Utilization of personalization in marketing automation and email marketing.
- Yang, L. C., & Nair, V. (2013). Risk perception study in tourism: Are we really measuring perceived risk? *Procedia - Social and Behavioral Sciences*, 144(20), 322–327.
- van Gogh, R., & Walrave, M. (2020). Personalization in Digital Marketing: Implementation Strategies and the Corresponding Ethical Issues. *The SAGE Handbook of Marketing Ethics*, 411.
- Johnson, G., Runge, J., & Seufert, E. (2021). Privacy-Centric Digital Advertising: Implications for Research. Available at SSRN 3947290.
- Aridor, G., Che, Y. K., & Salz, T. (2020). The economic consequences of data privacy regulation: Empirical evidence from gdpr (No. w26900). National Bureau of Economic Research.
- Singh, S., & Ahluwalia, S. (2021). Unboxing the Black Box: Demystifying the Impact of Consumers' Psychological Motivations on Their Perception of Online Advertising. *Vision*, 09722629211039353.
- Aseri, M., Dawande, M., Janakiraman, G., & S. Mookerjee, V. (2020). Ad-Blockers: A Blessing or a Curse?. *Information Systems Research*, 31(2), 627-646.
- Truong, Y., & Simmons, G. (2010). Perceived intrusiveness in digital advertising: strategic marketing implications. *Journal of strategic marketing*, 18(3), 239-256.
- Su, Y., & Jin, L. (2021). The Impact of Online Platforms' Revenue Model on Consumers' Ethical Inferences. *Journal of Business Ethics*, 1-15.
- Tucker, C. E. (2013). Social networks, personalized advertising, and privacy controls. *Journal of Marketing Research*, 51(5), 546–562.

- Watts, M. (2016). Programmatic Advertising: Shaping Consumer Behavior or Invading Consumer Privacy? (Doctoral dissertation, The Ohio State University).
- Liu-Thompkins, Y. (2019). A decade of online advertising research: What we learned and what we need to know. *Journal of advertising*, 48(1), 1-13.
- Tauro, D., Panniello, U., & Pellegrino, R. (2021). Risk management in digital advertising: An analysis from the advertisers' media management perspective. *International Journal on Media Management*, 23(1-2), 29-57.
- Williams, C. B., & Gulati, G. J. J. (2018). Digital advertising expenditures in the 2016 presidential election. *Social Science Computer Review*, 36(4), 406-421.
- Fernandez, L. (2020). Digital advertising in political campaigns and elections. In *A Research Agenda for Digital Politics*. Edward Elgar Publishing.
- Lee, H., & Cho, C. H. (2020). Digital advertising: present and future prospects. *International Journal of Advertising*, 39(3), 332-341.
- López Jiménez, D., Dittmar, E. C., & Vargas Portillo, J. P. (2021). Self-regulation of sexist digital advertising: From ethics to law. *Journal of Business Ethics*, 171(4), 709-718.
- Ha, L., & McCann, K. (2008). An integrated model of advertising clutter in offline and online media. *International Journal of Advertising*, 27(4), 569-592.
- Abdel Hamid, H. E., Awad, I. A., & Al Ansary, A. M. G. (2019). Offensive Advertising Phenomenon; Concepts and Causes. *International Design Journal*, 9(1), 13.
- Gomez-Mejia, G. (2020, July). "Fail, Clickbait, Cringe, Cancel, Woke": Vernacular Criticisms of Digital Advertising in Social Media Platforms. In *International Conference on Human-Computer Interaction* (pp. 309-324). Springer, Cham.
- Rejón-Guardia F., Martínez-López F.J. (2014) Online Advertising Intrusiveness and Consumers' Avoidance Behaviors. In: Martínez-López F. (eds) *Handbook of Strategic e-Business Management*. Progress in IS. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-39747-9_23
- Zeng, E., Kohno, T., & Roesner, F. (2021, May). What Makes a "Bad" Ad? User Perceptions of Problematic Online Advertising. In *Proceedings of the 2021 CHI Conference on Human Factors in Computing Systems* (pp. 1-24).
- Ha, L. (2017). Digital advertising clutter in an age of mobile media. In *Digital advertising* (pp. 69-85). Routledge.
- Goldfarb, A., & Tucker, C. (2011). Online display advertising: Targeting and obtrusiveness. *Marketing Science*, 30(3), 389-404.
- Palmieri, D. (2018). Impact of online advertising clutter on Advertising Avoidance Behaviours: a comparative cross-national study.

Pleyers, G., & Vermeulen, N. (2021). How does interactivity of online media hamper ad effectiveness. *International Journal of Market Research*, 63(3), 335-352.

Ivanjko, T., & Bezjak, T. (2017). "The Influence of Ad Blockers on the Online Advertising Industry." *INTEGRATING ICTIN SOCIETY*, 291.

Breuer, R., Brettel, M., & Engelen, A. (2011). Incorporating long-term effects in determining the effectiveness of different types of online advertising. *Marketing Letters*, 22(4), 327-340.

Newman, N. (2019). *Journalism, media and technology trends and predictions 2019*.

Arora, N. (2019). Study of How Online Advertising has become very Intrusive. *Think India Journal*, 22(33), 285-292.

Bubna, Josiah. *The Ethics of Adblock*. 2013/05/06.

<http://bubnaphotography.com/josiah/writing/TheEthicsofAdblock.pdf> (2017/04/16)

Marc L. Resnick, William Albert, *The Influences of Design Esthetic, Site Relevancy and Task Relevancy on Attention to Banner Advertising, Interacting with Computers*, Volume 28, Issue 5, August 2016, Pages 680–694, <https://doi.org/10.1093/iwc/iww042>

Jayanthi, B. V. (2021). AD BLOCKING PERSPECTIVES–DRIVERS OF PLEASANT AND UNPLEASANT ONLINE USER EXPERIENCES. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(12), 4223-4235.

Wielki, J., & Grabara, J. (2018). The impact of Ad-blocking on the sustainable development of the digital advertising ecosystem. *Sustainability*, 10(11), 4039.

Miklosik, A., Kuchta, M., & Zak, S. (2018). Monetising Content through Delivery of Advertisements: The Case of Ad Blockers. *Ad Alta: Journal of Interdisciplinary Research*, 8(1).

Brinson, N. H., Eastin, M. S., & Cicchirillo, V. J. (2018). Reactance to personalization: Understanding the drivers behind the growth of ad blocking. *Journal of Interactive Advertising*, 18(2), 136-147.

IAB. *Ad Blocking: Who Blocks Ads, Why and How to Win Them Back*. June 2016.

<http://www.iab.com/wp-content/uploads/2016/07/IAB-Ad-Blocking-2016-Who-Blocks-Ads-Why-and-How-to-Win-Them-Back.pdf> (2017/04/16)

Guttman, A. (2019). *Adblocking: penetration rate 2018, by country*. Statista, 2019

<https://www.statista.com/statistics/351862/adblocking-usage/>

Subramanian, U., & Zia, M. (2021). *Ad-Blockers and Limited Ad-Blocking*. Available at SSRN 3466105.

Breitwieser, J. (2020). "The Difference Between Digital Marketing and Social Media Marketing (and Why You Should Care)." *Business 2 Community*, 2020

<https://www.business2community.com/digital-marketing/the-difference-between-digital-marketing-and-social-media-marketing-and-why-you-should-care-02302456>

- Busch O. (2016) "The Programmatic Advertising Principle." In: Busch O. (eds) Programmatic Advertising. Management for Professionals. Springer, Cham. https://doi.org/10.1007/978-3-319-25023-6_1
- Wirth, David. (2017). "Programmatic Advertising: A disruptive Technology for the Media Industry".
- Lim, W. M., Gupta, S., Aggarwal, A., Paul, J., & Sadhna, P. (2021). How do digital natives perceive and react toward online advertising? Implications for SMEs. *Journal of Strategic Marketing*, 1-35.
- Johnson, J., Jungbauer, T., & Preuss, M. (2021). Online Advertising, Data Sharing, and Consumer Control. *Data Sharing, and Consumer Control* (August 2, 2021).
- Aiolfi, S., Bellini, S., & Pellegrini, D. (2021). Data-driven digital advertising: benefits and risks of online behavioral advertising. *International Journal of Retail & Distribution Management*.
- Kuang-Chih Lee, Ali Jalali, and Ali Dasdan. (2013). "Real time bid optimization with smooth budget delivery in online advertising." In *Proceedings of the Seventh International Workshop on Data Mining for Online Advertising (ADKDD '13)*. Association for Computing Machinery, New York, NY, USA, Article 1, 1–9. <https://doi.org/10.1145/2501040.2501979>
- Seitz J., Zorn S. (2016) Perspectives of Programmatic Advertising. In: Busch O. (eds) Programmatic Advertising. Management for Professionals. Springer, Cham. https://doi.org/10.1007/978-3-319-25023-6_4
- Strauss R.E., Becher J. (2016) "The CMOs Challenge." In: Busch O. (eds) Programmatic Advertising. Management for Professionals. Springer, Cham. https://doi.org/10.1007/978-3-319-25023-6_15
- Brosche K., Kumar A. (2016) Realtime Data Accelerates Online Marketing. In: Busch O. (eds) Programmatic Advertising. Management for Professionals. Springer, Cham. https://doi.org/10.1007/978-3-319-25023-6_18
- Jianqiang Shen, Sahin Cem Geyik, and Ali Dasdan. (2015) Effective Audience Extension in Online Advertising. In *Proceedings of the 21th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining (KDD '15)*. Association for Computing Machinery, New York, NY, USA, 2099–2108. <https://doi.org/10.1145/2783258.2788603>
- Saura, J. R., Palos-Sánchez, P., & Cerdá Suárez, L. M. (2017). Understanding the Digital Marketing Environment with KPIs and Web Analytics. *Future Internet*, 9(4), 76. doi:10.3390/fi9040076
- Pedro Palos-Sanchez, Jose Ramon Saura, Felix Martin-Velicia. (2019). A study of the effects of programmatic advertising on users' concerns about privacy overtime, *Journal of Business Research*, Volume 96, 2019, Pages 61-72, ISSN 0148-2963, <https://doi.org/10.1016/j.jbusres.2018.10.059>
- Järvinen, J., & Karjaluoto, H. (2015). The use of Web analytics for digital marketing performance measurement. *Industrial Marketing Management*, 50, 117–127. <https://doi.org/10.1016/j.indmarman.2015.04.009>
- Sun, J., Zhao, L., Liu, Z., Li, Q., Deng, X., Wang, Q., & Jiang, Y. (2021). Practical Differentially Private Online Advertising. *Computers & Security*, 102504.

Rus-Arias, E., Palos-Sanchez, P. R., & Reyes-Menendez, A. (2021, March). The Influence of Sociological Variables on Users' Feelings about Programmatic Advertising and the Use of Ad-Blockers. In *Informatics* (Vol. 8, No. 1, p. 5). Multidisciplinary Digital Publishing Institute.

Tudoran, A. A. (2018). Why do internet consumers block ads? New evidence from consumer opinion mining and sentiment analysis. *Internet Research*.

Deng, S., Tan, C. W., Wang, W., & Pan, Y. (2019). Smart generation system of personalized advertising copy and its application to advertising practice and research. *Journal of Advertising*, 48(4), 356-365.

Sołtysik-Piorunkiewicz, A., Strzelecki, A., & Abramek, E. (2019). Evaluation of Adblock Software Usage. *Complex Systems Informatics and Modeling Quarterly*, (21), 51-63.

Young, J. (2016). Meet the blockers: A quantitative analysis of ad blocker usage (Doctoral dissertation, Middle Tennessee State University).

Pujol, E., Hohlfeld, O., & Feldmann, A. (2015, October). Annoyed users: Ads and ad-block usage in the wild. In *Proceedings of the 2015 Internet Measurement Conference* (pp. 93-106).

Estrada-Jiménez, J., Parra-Arnau, J., Rodríguez-Hoyos, A., & Forné, J. (2019). On the regulation of personal data distribution in online advertising platforms. *Engineering Applications of Artificial Intelligence*, 82, 13-29.

Alaimo, C., & Kallinikos, J. (2018, December). Objects, metrics and practices: an inquiry into the programmatic advertising ecosystem. In *Working Conference on Information Systems and Organizations* (pp. 110-123). Springer, Cham.

Samuel, A., White, G. R., Thomas, R., & Jones, P. (2021). Programmatic advertising: An exegesis of consumer concerns. *Computers in Human Behavior*, 116, 106657.

Wiktor, J. W., & Sanak-Kosmowska, K. (2021). The Competitive Function of Online Advertising. An Empirical Evaluation of Companies' Communication Strategies in a Digital World. *Procedia Computer Science*, 192, 4158-4168.

Redondo, I., & Aznar, G. (2018). To use or not to use ad blockers? The roles of knowledge of ad blockers and attitude toward online advertising. *Telematics and Informatics*, 35(6), 1607-1616.

Ghose, A., Singh, P. V., & Todri, V. (2017). Got annoyed? Examining the advertising effectiveness and annoyance dynamics.

Burton, J. L., Gollins, J., McNeely, L. E., & Walls, D. M. (2019). Revisiting the relationship between ad frequency and purchase intentions: How affect and cognition mediate outcomes at different levels of advertising frequency. *Journal of Advertising Research*, 59(1), 27-39.

Todri, V., Ghose, A., & Singh, P. V. (2020). Trade-offs in online advertising: Advertising effectiveness and annoyance dynamics across the purchase funnel. *Information Systems Research*, 31(1), 102-125.

Sahni, N. S., Narayanan, S., & Kalyanam, K. (2019). An experimental investigation of the effects of retargeted advertising: The role of frequency and timing. *Journal of Marketing Research*, 56(3), 401-418.

Rodrigues, T., Guerreiro, J., & Loureiro, S. M. C. (2019). How effective are retargeting ads?. How effective are retargeting ads?, 895-898.

8. ANNEXES

8.1. INTERVIEWS

8.1.1. Interviews Questions

Questions For Adblocker Users (English)

1. How many hours per day are you usually online for personal use, besides to use social networks?
2. For how long have you been using Adblocker?
3. Why have you installed an Adblocker?
4. Would you prefer online ads if you felt they were useful information? So only see ads from brands and products that interest you?
5. Are you comfortable with sharing your online information so that brands know your interests and give you that relevant information?
6. Do you recall seeing the same ad repeatedly? If yes, would you like the option of stopping the ad of showing again?
7. Do you recall seeing the ad of a brand that you dislike? Would like the possibility of blocking just those brand or products that you would prefer not to see?
8. When a service we use is for free, it usually means they make money out of publicity. So the price you pay to use the service is being willing to see a lot of ads. Do you still prefer that is free or would you prefer to pay a subscription and not see any more ads?

Questions For Adblocker Users (Portuguese – interviews were made in this language)

1. Quantas horas por dia usas a internet para uso pessoal, fora uso de redes sociais?
2. Há quanto tempo usas Adblocker?
3. Porque instalaste Adblocker?
4. Gostarias mais de anúncios se sentisses que têm informação mais útil? Simplesmente ver anúncios de marcas e produtos que são do teu interesse?
5. Sentes-te confortável em partilhar a tua informação na internet de forma a que as marcas saibam os teus interesses e te abordem com produtos que são do teu interesse?
6. Lembraste de ver o mesmo anúncio várias vezes? Sim, gostarias de ter a possibilidade de pedir para deixar de o ver?
7. Lembraste de ver um anúncio de uma marca que não gostas? Gostarias de ter a possibilidade de bloquear anúncios de certas marcas ou produtos?
8. Quando usamos um produto ou serviço online de graça, normalmente significa que esse produto/serviço está a fazer dinheiro com publicidade. Portanto o preço de usar esse serviço/produto é termos de ser impactados por anúncios. Sabendo isso, preferes que seja gratuito ou preferirias pagar uma subscrição e não ter de ver mais anúncios?

Questions For Non-Adblocker Users (English)

1. How many hours per day are you usually online for personal use, besides to use social networks?
2. Do you recall seeing online advertisement? How often did you saw ads online? Every time you use it or just occasionally?
3. Have you ever thought of using Adblocker? If yes, why not yes? If no, why?

4. Would you prefer online ads if you felt they were useful information? So only see ads from brands and products that interest you?
5. Are you comfortable with sharing your online information so that brands know your interests and give you that relevant information?
6. Do you recall seeing the same ad repeatedly? If yes, would you like the option of stopping the ad of showing again?
7. Do you recall seeing the ad of a brand that you dislike? Would like the possibility of blocking just those brands or products that you would prefer not to see?
8. Every time a service we use is for free, it usually means they make money out of publicity. So the price you pay to use the service is being willing to see a lot of ads. Do you still prefer that is free or would you prefer to pay a subscription and not see any more ads?

Questions For Non-Adblocker Users (Portuguese – interviews were made in this language)

1. Quantas horas por dia usas a internet para uso pessoal, fora uso de redes sociais?
2. Lembraste de ver anúncios online? Com que frequência? Todos os dias ou apenas ocasionalmente?
3. Alguma vez pensaste em usar Adblocker? Se sim, porque ainda não usas? Se não, porquê?
4. Preferias ver anúncios se sentisses que a informação era mais útil? Se só visses anúncios de marcas ou produtos que te interessam?
5. Sentes-te confortável em partilhar a tua informação na internet de forma a que as marcas saibam os teus interesses e te abordem com produtos que são do teu interesse?
6. Lembraste de ver o mesmo anúncio várias vezes? Sim, gostarias de ter a possibilidade de pedir para deixar de o ver?
7. Lembraste de ver um anúncio de uma marca que não gostas? Gostarias de ter a possibilidade de bloquear anúncios de certas marcas ou produtos?
8. Quando usamos um produto ou serviço online de graça, normalmente significa que esse produto/serviço está a fazer dinheiro com publicidade. Portanto o preço de usar esse serviço/produto é termos de ser impactados por anúncios. Sabendo isso, preferes que seja gratuito ou preferirias pagar uma subscrição e não ter de ver mais anúncios?

8.1.2. Interview Answers

Adblocker User, Female, Age 18

- 1. Quantas horas por dia usas a internet para uso pessoal, fora uso de redes sociais?**
Não sei se consigo indicar horas certas. Sou capaz de passar mais horas nas redes sociais mas diria que entre novidades e procurar informações que me interessam entre umas duas a três horas.
- 2. Há quanto tempo usas Adblocker?**
Não sei dizer, desde que uso internet.
- 3. Porque instalaste Adblocker?**
Isso ainda me lembro, foi para deixar de ver anúncios. Sempre que ando online lá aparecia um anúncio que me atrasava o que eu queria fazer.
- 4. Gostarias mais de anúncios se sentisses que têm informação mais útil? Simplesmente ver anúncios de marcas e produtos que são do teu interesse?**

Sim definitivamente. Lembro-me que quando via os anúncios o que mais me irritava era que nem achava interessante, era só mesmo chato.

5. Sentes-te confortável em partilhar a tua informação na internet de forma a que as marcas saibam os teus interesses e te abordem com produtos que são do teu interesse?

Não. Prefiro subscrever newsletter e estar registada em sites do meu interesse para saber novidades do que saber que têm as minhas informações sem eu ter partilhado.

6. Lembraste de ver o mesmo anúncio várias vezes? Sim, gostarias de ter a possibilidade de pedir para deixar de o ver?

Isso seria perfeito. Lembro-me de ver imensas vezes o mesmo anúncio e não estar interessada mas não podia fazer nada para o parar. Era mesmo aborrecido por isso ter a possibilidade de indicar que não quero ver aquele anúncio faria toda a diferença.

7. Lembraste de ver um anúncio de uma marca que não gostas? Gostarias de ter a possibilidade de bloquear anúncios de certas marcas ou produtos?

Foi como disse na resposta anterior, perfeito novamente. Ver anúncios de marcas que não me interessam e que na maioria das vezes nem vou comprar não me faz sentido. Deveria ter a opção de bloquear para não ver anúncios de seguros ou bancos, não tenho mesmo interesse nenhum mas vejo imensas vezes a ser anunciado.

8. Quando usamos um produto ou serviço online de graça, normalmente significa que esse produto/serviço está a fazer dinheiro com publicidade. Portanto o preço de usar esse serviço/produto é termos de ser impactados por anúncios. Sabendo isso, preferes que seja gratuito ou preferias pagar uma subscrição e não ter de ver mais anúncios?

Posto desta forma continuo a preferir que seja gratuito, mas também porque como tenho adblocker acabo por ter o melhor dos dois mundos, em que não pago a subscrição mas também não tenho de ver os anúncios.

Adblocker User, Female, Age 28

1. Quantas horas por dia usas a internet para uso pessoal, fora uso de redes sociais?

Uns 30 minutos por dia.

2. Há quanto tempo usas Adblocker?

Há 8 anos.

3. Porque instalaste Adblocker?

Para não me aparecerem pop-ups. Irrita-me e muitas vezes acabo por clicar sem querer e perco tempo por causa disso.

4. Gostarias mais de anúncios se sentisses que têm informação mais útil? Simplesmente ver anúncios de marcas e produtos que são do teu interesse?

Sim, mas também de sugestões. Se ficar apenas pelo que conheço não descobro coisas novas, portanto não me importo de ver coisas novas.

5. Sentes-te confortável em partilhar a tua informação na internet de forma a que as marcas saibam os teus interesses e te abordem com produtos que são do teu interesse?

Não me sinto mas sei que o fazem e não tenho como o impedir.

6. Lembraste de ver o mesmo anúncio várias vezes? Sim, gostarias de ter a possibilidade de pedir para deixar de o ver?

Sim, e sim por favor. Se me arranjam essa solução adorava.

7. Lembraste de ver um anúncio de uma marca que não gostas? Gostarias de ter a possibilidade de bloquear anúncios de certas marcas ou produtos?

Sim e sim!

8. **Quando usamos um produto ou serviço online de graça, normalmente significa que esse produto/serviço está a fazer dinheiro com publicidade. Portanto o preço de usar esse serviço/produto é termos de ser impactados por anúncios. Sabendo isso, preferes que seja gratuito ou preferias pagar uma subscrição e não ter de ver mais anúncios?**

Preferia ter as duas opções, existem serviços em que o custo da subscrição não justifica a remoção de anúncios, outras vezes sim (por exemplo Spotify para mim). Também seria interessante se houvesse uma opção em que os anúncio não causassem tanto impacto no utilizadores, serem mais subtis e discretos.

Adblocker User, Female, Age 29

1. **Quantas horas por dia usas a internet para uso pessoal, fora uso de redes sociais?**

Cerca de 1 hora.

2. **Há quanto tempo usas Ablocker?**

Desde que tenho conhecimento... deve ser há uns 6 anos ou 7 anos.

3. **Porque instalaste Adblocker?**

Porque os anúncios incomodam, tiram tempo e eu não ligo à publicidade que aparece. Nunca cliquei em nenhum deles portanto mais vale evitá-los.

4. **Gostarias mais de anúncios se sentisses que têm informação mais útil? Simplesmente ver anúncios de marcas e produtos que são do teu interesse?**

Não sou o tipo de pessoa que se deixa levar pela publicidade que aparece. Primeiro, porque sou muito desconfiada e acho que tudo é falso. Segundo, porque quando quero alguma coisa de marcas que conheço, vou diretamente à marca procurar. Não costumo procurar marcas novas.

5. **Sentes-te confortável em partilhar a tua informação na internet de forma a que as marcas saibam os teus interesses e te abordem com produtos que são do teu interesse?**

Não, é um dos problemas que vejo hoje em dia com as capturas de voz e acesso a várias features das tecnologias que permitem que a publicidade "nos escolha". Prefiro não partilhar e minha informação e vou procurar as marcas que me interesse quando eu quero.

6. **Lembraste de ver o mesmo anúncio várias vezes? Sim, gostarias de ter a possibilidade de pedir para deixar de o ver?**

Vejo várias vezes o mesmo anúncio e sim, gostava de conseguir deixar de o ver.

7. **Lembraste de ver um anúncio de uma marca que não gostas? Gostarias de ter a possibilidade de bloquear anúncios de certas marcas ou produtos?**

Sim, gostava que houvesse essa possibilidade, não só com marcas que não gosto, mas também com as que gosto. Por vezes aparece um produto que já tenho, repetidamente, mesmo que de uma marca que gosto, e gostaria de o deixar de ver.

8. **Quando usamos um produto ou serviço online de graça, normalmente significa que esse produto/serviço está a fazer dinheiro com publicidade. Portanto o preço de usar esse serviço/produto é termos de ser impactados por anúncios. Sabendo isso, preferes que seja gratuito ou preferias pagar uma subscrição e não ter de ver mais anúncios?**

Prefiro com os anúncios, apesar de ir contra tudo o que disse nos pontos anteriores. Mas isto é um pensamento bastante comum da nossa cultura, evitar pagar e procurar uma borla.

Adblocker User, Male, Age 30

1. Quantas horas por dia usas a internet para uso pessoal, fora uso de redes sociais?

Não deve chegar a 3 horas, mas fica perto.

2. Há quanto tempo usas Ablocker?

Desde que apareceu, desde 2010 acho.

3. Porque instalaste Adblocker?

Anúncios forçados, pop-ups que aparecem do nada, e aqueles anuncios temporizados que fazem perder muitas horas de vida e muito muito raramente trazem algo de relevante.

4. Gostarias mais de anúncios se sentisses que têm informação mais útil? Simplesmente ver anúncios de marcas e produtos que são do teu interesse?

Não consigo gostar de anúncios na generalidade.

5. Sentes-te confortável em partilhar a tua informação na internet de forma a que as marcas saibam os teus interesses e te abordem com produtos que são do teu interesse?

Não tenho grande problema em partilhar a minha informação online de forma a ajudar as marcas a melhorar os seus produtos conforme o interesse da população mas nunca com o intuito de usar essa mesma informação para me abordar sobre os seus produtos.

6. Lembraste de ver o mesmo anúncio várias vezes? Sim, gostarias de ter a possibilidade de pedir para deixar de o ver?

Sim e sim. Lá está, desperdício de tempo estar a ver vezes e vezes sem conta se já vi e nao estou interessado.

7. Lembraste de ver um anúncio de uma marca que não gostas? Gostarias de ter a possibilidade de bloquear anúncios de certas marcas ou produtos?

Sim, diria que uma em 100 marcas me consegue cativar. Sim, bloquearia as que nao me interessam.

8. Quando usamos um produto ou serviço online de graça, normalmente significa que esse produto/serviço está a fazer dinheiro com publicidade. Portanto o preço de usar esse serviço/produto é termos de ser impactados por anúncios. Sabendo isso, preferes que seja gratuito ou preferias pagar uma subscrição e não ter de ver mais anúncios?

Prefiro que seja gratuito.

Adblocker User, Male, Age 31

9. Quantas horas por dia usas a internet para uso pessoal, fora uso de redes sociais?

Cerca de 1 hora.

10. Há quanto tempo usas Ablocker?

Desde que comprei o computador, portanto há uns 10 anos.

11. Porque instalaste Adblocker?

Porque existem anúncios que não me interessam e aparecem repetidamente.

12. Gostarias mais de anúncios se sentisses que têm informação mais útil? Simplesmente ver anúncios de marcas e produtos que são do teu interesse?

Sim, mas como sei que não vai acontecer exatamente dessa forma e vou continuar a ver anúncios do que não me interessa, prefiro continuar a usar adblocker.

13. Sentes-te confortável em partilhar a tua informação na internet de forma a que as marcas saibam os teus interesses e te abordem com produtos que são do teu interesse?

Sim, não tenho problemas. Não é informação sigilosa por isso tudo bem.

14. Lembraste de ver o mesmo anúncio várias vezes? Sim, gostarias de ter a possibilidade de pedir para deixar de o ver?

Sim, constantemente e repetidamente.

15. Lembraste de ver um anúncio de uma marca que não gostas? Gostarias de ter a possibilidade de bloquear anúncios de certas marcas ou produtos?

Igual, sim. E lá está, por saber que é algo recorrente e que não iria deixar de ver marcas que não gosto é que não abduco de adblocker.

16. Quando usamos um produto ou serviço online de graça, normalmente significa que esse produto/serviço está a fazer dinheiro com publicidade. Portanto o preço de usar esse serviço/produto é termos de ser impactados por anúncios. Sabendo disso, preferes que seja gratuito ou preferias pagar uma subscrição e não ter de ver mais anúncios?

Preferia pagar um valor justo e deixar de ver anúncios.

Non-Adblocker User, Female, Age 23

1. Quantas horas por dia usas a internet para uso pessoal, fora uso de redes sociais?

Diria que pode chegar a 5 horas por dia.

2. Lembraste de ver anúncios online? Com que frequência? Todos os dias ou apenas ocasionalmente?

Sempre que estou na internet que me lembro de os ver.

3. Alguma vez pensaste em usar Adblocker? Se sim, porque ainda não usas? Se não, porquê?

Nunca pensei, porque apesar de ver sempre anúncios e achar que é um exagero, não sinto essa necessidade. Não me incomodam assim tanto.

4. Preferias ver anúncios se sentisses que a informação era mais útil? Se só visses anúncios de marcas ou produtos que te interessam?

Sim. Sim.

5. Sentes-te confortável em partilhar a tua informação na internet de forma a que as marcas saibam os teus interesses e te abordem com produtos que são do teu interesse?

Sim! Não tenho qualquer problema, não tenho nada a esconder.

6. Lembraste de ver o mesmo anúncio várias vezes? Sim, gostarias de ter a possibilidade de pedir para deixar de o ver?

Não me acontece. Não me lembro de ver o mesmo anúncio com muita frequência.

7. Lembraste de ver um anúncio de uma marca que não gostas? Gostarias de ter a possibilidade de bloquear anúncios de certas marcas ou produtos?

Não há nenhuma marca que eu deteste o suficiente para não querer ver publicidade da mesma.

8. Quando usamos um produto ou serviço online de graça, normalmente significa que esse produto/serviço está a fazer dinheiro com publicidade. Portanto o preço de usar esse serviço/produto é termos de ser impactados por anúncios. Sabendo disso, preferes que seja gratuito ou preferias pagar uma subscrição e não ter de ver mais anúncios?

Prefiro que seja de graça.

Non-Adblocker User, Male, Age 24

1. Quantas horas por dia usas a internet para uso pessoal, fora uso de redes sociais?

2 horas por dia.

2. **Lembraste de ver anúncios online? Com que frequência? Todos os dias ou apenas ocasionalmente?**
Sempre.
3. **Alguma vez pensaste em usar Adblocker? Se sim, porque ainda não usas? Se não, porquê?**
Já pensei em ter, para não estar sempre a levar com anúncios, mas ainda não me dei ao trabalho de instalar.
4. **Preferias ver anúncios se sentisses que a informação era mais útil? Se só visses anúncios de marcas ou produtos que te interessam?**
Não, preferia não ter ads nenhuns.
5. **Sentes-te confortável em partilhar a tua informação na internet de forma a que as marcas saibam os teus interesses e te abordem com produtos que são do teu interesse?**
Sim porque gosto que direcionem os anúncios de acordo com os meus gostos!
6. **Lembraste de ver o mesmo anúncio várias vezes? Sim, gostarias de ter a possibilidade de pedir para deixar de o ver?**
Sim e sim.
7. **Lembraste de ver um anúncio de uma marca que não gostas? Gostarias de ter a possibilidade de bloquear anúncios de certas marcas ou produtos?**
Não me lembro de ver assim uma marca de que não goste mas sim, gostava de ter essa possibilidade pelo sim pelo não.
8. **Quando usamos um produto ou serviço online de graça, normalmente significa que esse produto/serviço está a fazer dinheiro com publicidade. Portanto o preço de usar esse serviço/produto é termos de ser impactados por anúncios. Sabendo isso, preferes que seja gratuito ou preferias pagar uma subscrição e não ter de ver mais anúncios?**
Gratuito sim.

Non-Adblocker User, Female, Age 29

9. **Quantas horas por dia usas a internet para uso pessoal, fora uso de redes sociais?**
Bem, neste momento para aí umas 3 horas.
10. **Lembraste de ver anúncios online? Com que frequência? Todos os dias ou apenas ocasionalmente?**
Todos os dias.
11. **Alguma vez pensaste em usar Adblocker? Se sim, porque ainda não usas? Se não, porquê?**
Sim sem dúvida. Quando um anúncio que eu já vi me aparece repetidamente ou quando me aparecem anúncios de sites onde acabei de fazer encomenda, isso irrita-me um bocadinho. Ainda não uso porque honestamente até gosto de ver o que vai aparecendo. No sentido em que, posso ir a um site e não ter reparado em algum produto, gosto que me vá relembrando de coisas que eu gosto no dia-a-dia.
12. **Preferias ver anúncios se sentisses que a informação era mais útil? Se só visses anúncios de marcas ou produtos que te interessam?**
Sim e sim. Penso que nem preciso explicar o porquê. Prefiro ver o que me interessa do que o que não me interessa.
13. **Sentes-te confortável em partilhar a tua informação na internet de forma a que as marcas saibam os teus interesses e te abordem com produtos que são do teu interesse?**
Sim, não tenho problema. Se não for nada de pessoal e for para este fim não tenho problema.

14. Lembraste de ver o mesmo anúncio várias vezes? Sim, gostarias de ter a possibilidade de pedir para deixar de o ver?

Sim, gostava. Pela mesma razão do que já respondi antes. Às vezes já não quero ver aquela marca, aquele artigo, já comprei, já não me interessa e continua-me a aparecer.

15. Lembraste de ver um anúncio de uma marca que não gostas? Gostarias de ter a possibilidade de bloquear anúncios de certas marcas ou produtos?

Raramente me acontece. Normalmente vejo coisas que anteriormente já pesquisei. Mas preferia pedir para não ver determinadas coisas. Já me aconteceu entrar num site ocasionalmente, ou mesmo comprar algum produto com a equipa do trabalho e depois continua a levar com o anúncio de um produto que não me interessa a mim particularmente. Não sei se é mesmo porque depois não me interessam, mas sinto que há certas marcas que até aparecem demasiadas vezes.

16. Quando usamos um produto ou serviço online de graça, normalmente significa que esse produto/serviço está a fazer dinheiro com publicidade. Portanto o preço de usar esse serviço/produto é termos de ser impactados por anúncios. Sabendo isso, preferes que seja gratuito ou preferias pagar uma subscrição e não ter de ver mais anúncios?

Prefiro que seja gratuito desde que não exista publicidade de forma exagerada. Porque chega a um ponto que, entre coisas que não me interessam muito e coisas que me interessam, é uma grande confusão e então fico só irritada.

Non-Adblocker User, Male, Age 31

1. Quantas horas por dia usas a internet para uso pessoal, fora uso de redes sociais?

Acho que por dia não sei dizer portanto vou dizer por semana. Talvez umas 3 horas, não muito mais do que isso.

2. Lembraste de ver anúncios online? Com que frequência? Todos os dias ou apenas ocasionalmente?

Sim, sempre. Em todo o lado, todos os dias, nem é ocasionalmente, é sempre.

3. Alguma vez pensaste em usar Adblocker? Se sim, porque ainda não usas? Se não, porquê?

Não uso, mas não uso porque também, confesso que não conhecia e nem sei bem para o que serve. Presumo que seja para bloquear anúncios mas por acaso nunca tinha ouvido falar. Por isso, é essa a resposta.

4. Preferias ver anúncios se sentisses que a informação era mais útil? Se só visses anúncios de marcas ou produtos que te interessam?

Eu diria que sim, até porque alguns anúncios, especialmente no Instagram, apesar de não ser o caso nesta entrevista eu sei, mas no Instagram às vezes aparecem-me coisas que fazem mesmo o meu género e aí agradeço por esse anúncio, sim.

5. Sentes-te confortável em partilhar a tua informação na internet de forma a que as marcas saibam os teus interesses e te abordem com produtos que são do teu interesse?

Sim! Eu sinto-me confortável, eu prefiro até partilhar a informação que eu quero partilhar para receber realmente publicidade que me faça sentido. Porque já que é para levar com publicidade não vale a pena estar a ver publicidade das cuecas da avó, porque não vou usá-las. Portanto para mim não é um problema.

6. Lembraste de ver o mesmo anúncio várias vezes? Sim, gostarias de ter a possibilidade de pedir para deixar de o ver?

Sim, é verdade. Demasiadas vezes diria. E se eu tivesse a possibilidade era isso mesmo. Eu quero ver uma vez, a partir daí não me chateiem mais com a mesma história.

7. Lembraste de ver um anúncio de uma marca que não gostas? Gostarias de ter a possibilidade de bloquear anúncios de certas marcas ou produtos?

Sim lembro-me, mas no Instagram dá para bloquear anúncios de certas marcas ou produtos. Dá para o fazer lá nas opções dá para dizer o porquê de não querermos ver aquela publicidade. Agora, nos sites também diria imenso jeito.

8. Quando usamos um produto ou serviço online de graça, normalmente significa que esse produto/serviço está a fazer dinheiro com publicidade. Portanto o preço de usar esse serviço/produto é termos de ser impactados por anúncios. Sabendo isso, preferes que seja gratuito ou preferias pagar uma subscrição e não ter de ver mais anúncios?

Para mim esta pergunta é clara. Eu não quero pagar mais um cêntimo por nada. Se eventualmente eu conseguir usufruir de alguma coisa sem um custo direto para mim tanto melhor. Exatamente por isso, não há nada grátis, eles de alguma forma já a conseguir retirar a remuneração deles portanto é isso.

Non-Adblocker User, Female, Age 35

1. Quantas horas por dia usas a internet para uso pessoal, fora uso de redes sociais?

Eu diria uma hora e meia a duas horas. Uns dias mais, outros dias menos, mas em média é isso.

2. Lembraste de ver anúncios online? Com que frequência? Todos os dias ou apenas ocasionalmente?

Claro que sim! Com frequência, todos os dias. Não é ocasionalmente, é mesmo todos os dias, a toda a hora. Extremamente irritante.

3. Alguma vez pensaste em usar Adblocker? Se sim, porque ainda não usas? Se não, porquê?

Sim já pensei. Porque ainda não uso? Confesso que utilizo mais o telemóvel e ainda não percebi como instalar.

4. Preferias ver anúncios se sentisses que a informação era mais útil? Se só visses anúncios de marcas ou produtos que te interessam?

Ahhh, não. Detesto anúncios. Eu é que gosto de procurar a minha informação, aquilo que eu quero. Não gosto de estar sempre a ser bombardeada com marcas e produtos, mesmo aqueles que me interessam.

5. Sentes-te confortável em partilhar a tua informação na internet de forma a que as marcas saibam os teus interesses e te abordem com produtos que são do teu interesse?

Não. Não fico de todo confortável porque obviamente tudo o que me vão a apresentar é de forma a que eu compre os produtos. E eu não sei se teria autocontrolo para não comprar se tudo o que me apresentam é do meu interesse.

6. Lembraste de ver o mesmo anúncio várias vezes? Sim, gostarias de ter a possibilidade de pedir para deixar de o ver?

Sim. Ah sim sem dúvida. Vejo constantemente produtos que não me interessam e marcas que não vou comprar e não tenho forma de os evitar.

7. Lembraste de ver um anúncio de uma marca que não gostas? Gostarias de ter a possibilidade de bloquear anúncios de certas marcas ou produtos?

Sim sim. Sim, novamente. Quero conseguir bloquear tudo.

8. **Quando usamos um produto ou serviço online de graça, normalmente significa que esse produto/serviço está a fazer dinheiro com publicidade. Portanto o preço de usar esse serviço/produto é termos de ser impactados por anúncios. Sabendo isso, preferes que seja gratuito ou preferias pagar uma subscrição e não ter de ver mais anúncios?**

Ora, eu preferia pagar uma subscrição, se fosse um valor pequeno. Eu preferia do que estar sempre a ver anúncios. Porque até nos distrair. Porque uma pessoa procura um determinado... seja o que for, na internet, e a nossa atenção fica dispersa com a publicidade que vai aparecendo. Portanto sim, eu estaria disposta a pagar um pequeno valor para não ter de ver mais anúncios.

Non-Adblocker User, Male, Age 62

- 1. Quantas horas por dia usas a internet para uso pessoal, fora uso de redes sociais?**
Uma hora, e há dias que nem isso.
- 2. Lembraste de ver anúncios online? Com que frequência? Todos os dias ou apenas ocasionalmente?**
Ocasionalmente, não me lembro de ver assim muitos.
- 3. Alguma vez pensaste em usar Adblocker? Se sim, porque ainda não usas? Se não, porquê?**
Não sei o que é.
Adblocker serve para bloquear os anúncios online, para os deixar de ver.
Ah sim bloqueio, bloqueio tudo.
Mas se não usa Adblocker como os bloqueia?
Quando diz assim “Quer utilizar os anúncios e cookies?” e eu escolho não.
- 4. Preferias ver anúncios se sentisses que a informação era mais útil? Se só visses anúncios de marcas ou produtos que te interessam?**
Sim e sim. Mas mesmo assim sou um bocado cético. Não ligo para anúncios.
- 5. Sentes-te confortável em partilhar a tua informação na internet de forma a que as marcas saibam os teus interesses e te abordem com produtos que são do teu interesse?**
Não, geralmente tenho uma atitude de reserva, porque eu não sei e à cautela reservo a minha informação.
- 6. Lembraste de ver o mesmo anúncio várias vezes? Sim, gostarias de ter a possibilidade de pedir para deixar de o ver?**
Sim. Sim.
- 7. Lembraste de ver um anúncio de uma marca que não gostas? Gostarias de ter a possibilidade de bloquear anúncios de certas marcas ou produtos?**
Sim e sim. Quando a marca não me interessa apago. Já vi algumas com hipótese de eliminar no canto.
- 8. Quando usamos um produto ou serviço online de graça, normalmente significa que esse produto/serviço está a fazer dinheiro com publicidade. Portanto o preço de usar esse serviço/produto é termos de ser impactados por anúncios. Sabendo isso, preferes que seja gratuito ou preferias pagar uma subscrição e não ter de ver mais anúncios?**
Não não. Não pago nada, sou forreta e não pago nada. Prefiro ver anúncios e lá terei de os apagar quando aparecerem mas pagar não.