

University of Economics, Prague
International Business



**The impact of personalised advertising on
consumer behaviour**

Author: Zuzana Kupčová

Thesis instructor: Ing. Markéta Lhotáková, Ph.D.

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Declaration:

I hereby declare that I am the sole author of the thesis entitled “The impact of personalised advertising on consumer behaviour “. I duly marked out all quotations. The used literature and sources are stated in the attached list of references.

In Prague on 24.4.2019

Zuzana Kupčová

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Introduction

Personalization drives growth. Not only it causes a shift in how companies are creating marketing strategies in all industries, but it is also changing consumer preferences and desires. For businesses, personalisation can reduce acquisition costs, increase revenues as well as the efficiency of marketing. However, there is a real challenge to transform the marketing organization's processes and practices to achieve the full potential of personalization (McKinsey&Company, 2016). Consumers are more and more demanding and they do not want to be bombarded with messages, most of which are off target. Therefore, this paper brings insight into personalised advertising strategies, potentials, risks and most importantly, examines consumer's behaviour in more detail. It will also touch on the topic of data privacy which is closely correlated with personalisation. The increased collection and usage of consumer data by companies means increased use of data for digital advertising.

Because of the immense speed in technology development, some of the resources and papers on the topic of personalised advertisements just from a few years ago, are already inaccurate. New research needs to be done in order to fully discover the actual potential of personalised advertising moreover, marketing professionals need to be able to recognize the right amount of personalisation for the purpose of satisfying the customer.

Therefore, the goal of this paper in the theoretical part is to firstly define personalised advertising and discuss its strategies. Secondly, to examine the consumer's data usage, privacy and sensitivity concerns. The objective of the third chapter is to describe further the consumer's reaction towards personalised advertisement. The main goal in the practical part is to examine the relationship between personalised marketing, ad likeability and data usage further. For the purpose of this, four hypotheses were created. The quantitative data which was collected through survey, processed and empirical research was done. With the results of the research, it is possible to determine to what extent personalisation effects consumers' attitude towards the ad and their behaviour.

1. Personalised advertising

1.1. Definition & evolution of personalised advertising

In recent years, marketing has completely changed its form due to the rapid development in technology and online marketing has become an extremely dynamic and innovative market. The main goal for businesses is not any more to generate the greatest revenue, but the ability to connect with the individual customer and interact with him/her directly. This is enabled through the technological development of devices, the creation of campaigns, work across social media, display of advertising and e-commerce. We live in an era driven by information technologies such as algorithms, databases, data mining and artificial intelligence. With users easily sharing personal data online and web cookies tracking every click, businesses are through algorithms able to collect, analyse data and through them interact with customers, and match them with the right content. This concept, personalised marketing, refers to “marketers offering customers specific products for their consideration based on the consumer information” (Gillenson, 2000).

Personalised advertising can be compared to the shopping in past, decades, even centuries ago. Customers walked into their local store where salesman greeted them by name, perhaps engaged in a bit of conversation, gave them recommendations and based their selection on the knowledge he had about them (Gillenson, 2000). People have always liked personal touch while shopping and therefore, even with globalization and huge corporations taking over all industries, personalised marketing has not vanished and conversely, it is more popular than ever before. However, nowadays it is done via different channels, methods and on all scales. “What has changed in this century is that information technology has profoundly reduced the need to own physical infrastructure and assets” (Marshall W. Van Alstyne, Geoffrey G. Parker, & Sangeet Paul Choudary, 2017). Technology allows nearly frictionless participation that strengthens network effects, the demand-side economies of scale and enhances the ability to capture, analyze, and exchange huge amounts of data that increase the business’ value

(Marshall W. Van Alstyne et al., 2017). This also means that advertising can be more informative to consumers than it was before.

For the marketer, it is possible to target specifically only people who are interested in making a purchase and fall within the target market. This has not been possible earlier than decade ago. For instance, an ad introducing the newest scuba diving equipment does not engage the attention of the majority of people but might be very informative for a people interested in diving. Moreover, the content of advertising can be personalized to fit the information for the person viewing the ad. Therefore, in this example, the content of the ad could be geared towards emphasizing different properties of the diving suit to beginners versus professional divers (Tucker, 2012). Further examples of personalised advertising is a targeted Facebook ad, new recommendation on Netflix account or that annoying newsletter which comes every second day. Along with taking personalisation to the next level, customers have various reactions, opinions and worries on this subject.

1.1.1. Possible effects of personalised advertising

Personalised advertising is definitely able to create a more personal relationship between customers and businesses and according to (McKinsey&Company, 2017), it is able to drive revenue growth between 10-30%. Research has also shown that digital targeting significantly boosts response to ads and the ad performance declines when the access to consumer data is weakened (HBR, 2017). “For marketers, personalised advertising will be more cost-effective, compared with traditional mass advertising, because it has the potential to distribute highly tailored commercial messages to an individual consumer who has been identified as a viable prospect in the target market (Kim, Jong Woo, Byung Hun Lee, Michael J. Shaw, Hsin-Lu Chang, and Matthew Nelson 2001)” (Baek, T.H., Morimoto, M., 2012). Study conducted by BCG, claims that by 2022 in three sectors alone—retail, health care, and financial services—personalization will push a revenue shift of some \$800 billion to the 15% of companies that get it right. However, some issues should be taken into consideration in the concept of personalised advertising such as irrelevancy of the ads or privacy concerns (BCG, 2017). It can be very challenging to find the line between bringing a genuine value to the customer and being creepy,

pushy or involuntarily offensive. As (Iacobucci, 2006) stated in her research, in some instances, personalized recommendations may actually lead to customer dissatisfaction, even annoyance or irritation. This thesis is going to further explore how can personalised marketing affect customers and what are the factors which influence their attitude and subsequently their buying behaviour.

1.2. Personalised advertising strategies

1.2.1. Control to the customer

There are a few important pillars which marketers need to follow in order to make personalised ads successful and effective. One of the first rules is that people need to be given control on what they want to see and manage their privacy settings easily. "Solution to resolving the informativeness and intrusiveness trade-off is to give consumers explicit control over how their information is used in the hope of reducing the disutility that results from intrusiveness" (Tucker, 2012). "If consumers feel they lack control over their personal information posted by personalized advertising, they are likely to have irritating experiences that could contribute to cognitive or behavioural components of resistance, including ad scepticism and avoidance" (Baek et al., 2012). As a consequence of these findings, the majority of the companies have been doing a reassessment of their privacy settings and informing its visitors more. Google, for example, used Facebook ads to remind users of the celebration of "Data privacy day" trying to encourage them to check their privacy settings on their Google account and how can they personalise their experience. This might be kind of unconventional way how to remind users their span of control even though it is on another platform. When Facebook updated their privacy controls and gave their users the ability to regulate their personally identifiable information in the middle of the field test, though it did not change how advertisers used anonymous data to target ads, Tucker found that after this revision, the effectiveness (measured in clicks) of personalized ads increased and users were twice as likely to click on personalized ads (Tucker, 2012). We can assume from the Facebook case that this phenomenon can be in some way a win for businesses because their online advertising strategy doesn't even have to significantly change and customers feel better that they can manage their privacy settings when in reality the

work of advertisers with their data will stay the same. Not to mention that this might be taken as a kind of psychological manipulation of the customer.

In the era of modern technology when algorithms are not only emulating but beating the human brain, it is easy to get caught up and forget about the human common sense. For that reason, it can be often useful to be more traditional and directly ask customers what kind of advertisement would they prefer, without digital surveillance (HBR, 2017). The online masters of recommendation algorithms, Netflix and Amazon, also enable this option to its users. As part of the on boarding process, Netflix regularly asks new users to rate their interest in movie genres and rate any movies they've already seen (Bulygo, 2018). Moreover, for the purpose of pleasing its viewers, in 2017 Amazon asked customers to choose its next online original series for production from five video pilots (BCG, 2017). This is a great example of how Amazon, the biggest Internet company in the world, can interact with its audience. It may seem like a simple move, but what might be an easy step for Amazon, can be seen as a huge thing for a consumer. Customer that way feels valued and has impression that his/her opinion matters to Amazon.

The next factor in personal advertising which might be crucial is the message accompanying the ad. An experiment done by Harvard Business Review showed a very similar pattern as the case when Facebook gave an option to manage their personal information. In the HBR experiment, the first group of participants received the ad that was saying that third-party information was used to generate it. The second group saw the same message but also a reminder that they can set their ad preferences. The third group saw just the ad. Buying interest was lower in the first group than in the last one. However, in the second group, consumers who were reminded that they could dictate their ad preferences, the buying interest was the same as in the group without message (HBR, 2017). It is, therefore, possible to say that for consumers, the vision created that they have the power to regulate their personal data or that they are able to control the ad which is displayed to them it, is actually more powerful than the actual reality. Consumers here should be protected by legislation, in addition to clarity and fundamentals of the business of course, to have the right to know how are their data used.

1.2.2. Legal vs. ethical

Nowadays, as the advanced development of information-processing technology allows to track every detail of people's online movement, it is common for businesses to get carried away and cross the line of human courtesy. Because the fact that is legal to learn something private about customers doesn't mean that it's ethically appropriate. Therefore, it is very important for every business to set some boundaries while targeting online. Recommendation engines force organizations to fundamentally rethink how to get greater value from their data while creating greater value for their customers (Schrage, 2017). The EU's general data protection regulation (GDPR), which came to effect in May 2018, strengthen rules in targeted advertising and many companies had to significantly change their rules of operation and manners. It explicitly labels such categories of information as so sensitive, with such a risk of human rights breaches, that it mandates special conditions around how they can be collected and processed (Hern, 2018). Such as a person's race, religion, sexual orientation, health conditions etc. For example, the American retailer Target developed an algorithm which could predict which women are pregnant and according to (The New York Times, 2012) the retailer's revenue just only from this algorithm, which was manipulating with such a private information, was more than a billion dollars. After scandals when customers found out how much does the retailer actually knows about them, Target came up with a new strategy when they started inserting coupons for random items alongside those for expecting mothers to be less obvious.

The business which is by all means built on the collection of data and observation of users is Netflix. They are not only interested in what are customers watching but when exactly, why they pause or Netflix observes their scrolling behaviour. Netflix definitely knows how to work with personalised advertising and it is the reason why it is so successful. However, more recently, Netflix has been accused of targeting viewers by using race for targeting promotion after generating movie posters with black cast members on them to try to compel black users to watch, even though the cast members only had few lines in the movie. However, Netflix has rejected these accusations and responded: "We don't ask members for their race, gender, or ethnicity so we cannot use this information to personalize their individual Netflix experience"

(Sharf, 2019). Google and Facebook have also updated their policies and do not allow advertisers to target their ads based on any information of sensitive nature (HBR, 2017).

The application of GDPR and recent scandals brought bigger awareness for people about being targeted in advertising and processing their personal information. Thus, it is very important for marketers to be transparent about data usage practices. Many of them display an AdChoices icon, a blue symbol indicating that the accompanying ad has been tailored to the individual recipient's characteristics. In some cases, when customers click on the icon, they find out why the ad has been shown to them (HBR, 2017). Facebook enables advertisers to find the perfect audience, the optimal set of eyes for their message introduced "Why I am seeing this ad" feature in 2014. However, there is still a pressure on businesses to be even more transparent (Hern, 2018).

In times when data flows constantly from users to business, it is possible to see the real-time customization of experiences and its ability to offer the most relevant content to interested consumers. "One of the best examples is once again Facebook, where newsfeed is a highly-customized gossip column that rearranges itself in real time based on user preferences and actions" (Choudary, Parker, Parker, & Van Alstyne, 2015, pp. 53–55). Customers sometimes do not even realize that the picture which they are seeing is specifically tailored to them. Today's algorithms are so exact that they are able to consider thousands of aspects and evaluate what exactly should the customer see. As a matter of a fact, Joris Evers, Director of Global Communications for Netflix, commented that there is in fact 33 million different versions of Netflix (Bulygo, 2018). Conversely, excessive customization may also pose a challenge by constantly showing more of what a user has enjoyed in the past to the detriment of the overall experience. Businesses, therefore, must ensure that they balance relevance with serendipity (Choudary et al., 2015, pp. 53–55). Nevertheless, Netflix doesn't seem to be worried about the glut of personalisation and currently has one of the best recommendation algorithms together with more than 140 million subscribers.

1.3. Digital versus traditional business view on personalization

Digital natives, also called platforms are still ahead in personalisation. This is because they have built their business models around collecting data and responding to customer needs (BCG, 2017). Platforms allow participants to co-create and exchange value and constantly interact with each other (Choudary et al., 2015, pp. 33–55). A deeper connection with customers enables to fully understand their needs and to look at each customer separately. In the last decade, multi-sided platforms became extremely popular such as Airbnb, Uber or Alibaba. These platforms do not have their own properties or products and are only intermediaries between demand and supply. This is a trend which brings more affordable, convenient and quicker service to customers. Traditional businesses are therefore trying to catch up as fast as possible. They have a challenging task to merge physical and digital experience and through them, deepen connections with the customer.

Masters in personalisation stand to capture a disproportionate share of category profits in the new age of individualized brands while those who move slow will lose customers, share, and profits (BCG, 2017). Surely, if they do not make the change fast enough they will be overtaken by their data mastering competitors. This is a case of Blockbuster, Sears which have already declared bankruptcy or Toys"R"Us and Walmart which are fighting a difficult fight with Amazon. Some companies are despite that making a great progress such as McDonald's. Its last year's focus was on investing in digital platforms. They have introduced pre-ordering through their app which made the fast-food order even faster. As it is trying to compete with UberEATS, Deliveroo and other fast food competitors, they have also expanded their delivery service.

2. Data usage

2.1. Categorization of customer data

Data are the key input into creating algorithms, through them we are able to create personalised advertising. “Using increasingly granular data, from detailed demographics and psychographics to consumers’ clickstreams on the web, businesses are starting to create highly customized offers that steer consumers to the “right” merchandise or services—at the right moment, at the right price, and in the right channel” (Thomas H. Davenport, Leandro DalleMule, & John Lucker, 2014). To put it another way, the goal is to detect user’s needs and match them to current offerings, which is done by algorithms. Specific algorithms are usually a trade secret but for instance in 2006 Netflix, unhappy with its own recommendation algorithm, offered a prize of one million dollars to anyone able to improve the initial result by 10%. Interestingly, the algorithms were created but afterwards never used (Bulygo, 2018). “Recommenders’ true genius comes from their opportunity to build virtuous business cycles: The more people use them, the more valuable they become; the more valuable they become, the more people use them (Schrage, 2017).

There are various types of user data which are being collected by companies.

(Morey, Forebath and Schoop, 2015), divided them into three categories:

- Self-reported data (e-mail address, work and educational history, age and gender)
- Digital exhaust (location data and browsing history)
- Profiling data, (personal profiles that can generate predictions about individuals’ interests and behaviours, which are formed by a combination of self-reported data, digital exhaust, and other sorts of data).

On the other hand, (Gillenson, 2000), has introduced a different categorization of customer data that can be collected for personalized marketing, also divided into three basic categories:

- Personal data - a broad category, that includes, but is not limited to, demographic data. Thus, personal data includes age, education level, income level, geographic location, family members

etc. This category may also include such "personal data" as an image of the customer's face, the dimensions of a customer's body, or the furniture layout in a customer's home.

- Preference or interest data - could include such general items as a person's favourite colour, but it is more typically associated with preferences within a particular product category, such as jazz or classical as the person's preferred music category.
- Sales history - products a customer has previously purchased from the retailer. Previous purchases can often be the best guide to what a customer will or wants to buy next.

It is important to understand these different data categories as we look at their use in various personalized marketing techniques (Gillenson, 2000). Even though the categorization by Gillenson is older, I believe both of them are still relevant and accurate. Most of the companies still need to enhance their ability to extract value from their data assets by building proprietary data sets, securing the permission of customers to collect and use their data, and entering partnerships to acquire complementary data assets. Lot of them are still missing the tools, talents and processes to extract signals from this data to drive more personalized interactions (BCG, 2017).

2.2. Privacy concerns and sensitivity

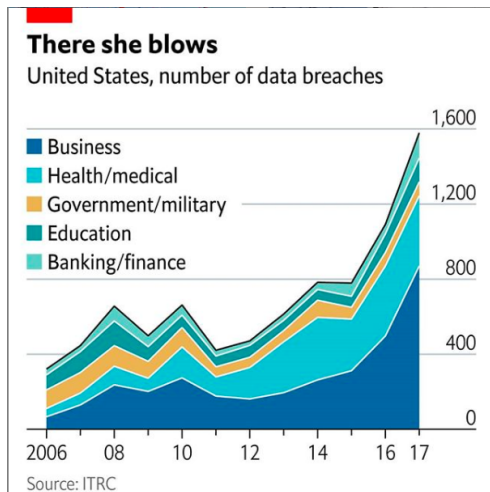
Data collection is closely linked to technological progress and legislative changes, particularly laws on consumer protection, data security and intellectual property. Therefore, with this intention, good market functioning requires transparency, which should be guaranteed by effective implementation of the consumer protection rules (Bourreau, Streel, Graef, 2017). Nevertheless, the expansion of the amount of online data collected for the consumer profile building and its inconsiderate handling by some companies has subsequently led to threatened personal privacy (Christiansen, 2011). A very unhappy example is when social network Snapchat introduced feature "Snapmap". This feature using geolocation allowed users to track a person's location in real time as they posted pictures. As this app is very popular among young children, parents and schools were very worried about their safety. Since public identified this feature as not only creepy but dangerous, it was later changed to a "lighter" version (WIRED, 2018).

A few months later, Cambridge Analytica, firm that caused the largest online privacy scandal, caused a stir in online privacy when it breached data of 87 million Facebook users. In view of the failure to protect its users and lack of transparency, Facebook was fined £500,000. “This event caused larger, profound shifts in the world of data privacy and security that have major implications for how organizations think about and manage both” (Andrew Burt, 2019). Since the event, user’s privacy is still a sensitive topic, people are concerned hence it has come under increased public scrutiny. In January 2019, the Facebook CEO Mark Zuckerberg has commented on and defended Facebook’s advertising policy once again and tried to further elaborate on the situation. He explained how Facebook divides people due to ad relevance: “...based on what pages people like, what they click on, and other signals, then charge advertisers to show ads to that category. Although advertising to specific groups existed well before the internet, online advertising allows much more precise targeting and therefore more-relevant ads...” wrote (Zuckerberg, 2019).

As a matter of the fact, it can be said that the panic of online users around companies’ data mistreatment it is somewhat valid. This is a problem which is not only concerning users of social media, but it concerns every industry, moreover, the number of hacks is dramatically increasing. The graph (*Figure 1*) illustrates the number of data breaches between years 2006-2017 in the USA. The vertical line represents the number of data breaches and the horizontal line the years this breaches happened. As can be seen from the graph , between 2014 and 2017, there was a significant increase, when the number of data breaches has more than doubled (The Economist, 2019). Five sectors are represented on the graph and in all of them, the sharpest increase in data breaches was around year 2015.

Consumers are however not the only one feeling anxious. Companies are increasingly worried about the threats lurking in their computer systems. Along with Cambridge Analytica scandal, the hotel chain owned by Marriott International reported theft of data from half a billion customers (The Economist, 2019). Losses suffered also British Airways, food company Mondelez or the biggest shipping company in the world, Danish Maersk. Consequently, the market for cybersecurity is sharply growing.

Figure 1



Source: (The Economist, 2019b)

To some extent, the leaking of private information appears inevitable in modern society. People, when it comes to privacy, do not always behave logically online. For example, they are willing to sharing intimate details with total strangers while keeping secrets from loved ones (Leslie K. John et al., 2017). First, a voluntary sharing of data occurs when customers are willing to provide access to their data and they gave just a second of thought before they click on the approval about data processing and privacy policies, which can have unintended consequences. Individuals click through warnings, permission requests, and privacy policies revealing their personal information very easily to other parties. Regarding Facebook, the vast majority of users agreed with compliance with GDPR because of ad relevance. Zuckerberg further noted that “We have a strong incentive to protect people’s information from being accessed by anyone else.” and Facebook users can control whether their information is used for ads but they are not able to control how is used for security and operating services (Zuckerberg, 2019). The involuntary disclosure occurs when technology collects data and tracks movements by Internet users without their knowledge and/or permission. For example Cookies, the placement of Web browser text files is used by websites to track files and Internet viewing histories in online targeted ads, as well as to aid collection of information and

building of personal profiles (Christiansen, 2011). Even more invasive, deep packet inspection involves the reading and analysing of ‘packets’ of information travelling across the Internet. “The purpose is to monitor all online activity of an Internet user, not just web browsing, resulting in extremely detailed profiles of that user” (Stecklow & Sonne, 2010).

Although we might talk about ignorance from the site of the user when s/he is just quickly going through privacy rules and approving permission, it is honestly hard to say what other option is there? Most of the websites are difficult or even impossible to use without GDPR or cookies approval. For websites, it would be adverse to stop using tailored personalised advertising therefore, businesses need to find a way how to obtain the benefits of highly-sophisticated targeting techniques and at the same time not scare away the customer.

2.3. Adblockers and cookies

The increased awareness of privacy risks of data collection and usage has led to people blocking cookies on websites and using various ad blocking tools, which can be a struggle for marketers. Since May 2011, all EU countries have adopted legislation, known as ‘the cookie law’, that requires any website targeted to EU citizens to retrieve informed consent in order to store or access any information on the user’s hardware, essentially requiring them to provide opt-in for online behavioural advertising (Solon, 2012). In 2017, there was a 30% annual increase in a number of ad blocker users, which corresponds with approximately 600 active users. All of that blocking had a clear monetary impact, and it's anticipated that by 2020, \$35 billion a year will be lost (Lauren Nettles, 2018). Paul Verna, an analyst from eMarketer says that “Ad blocking is a detriment to the entire advertising ecosystem” (Mark Scott, 2017). Therefore, some companies are forcing consumers to turn off their ad blocker to surf on their website (O’Reilly, 2017). Facebook, one of the world’s largest purveyors of online ads, when trying to block people from using such software, got only into a race with tech start-ups offering new ad-blocking tools (Mark Scott, 2017). Netflix has tried a creative approach to this. For promoting the drama Black Mirror, when customers used an ad blocker, the ad saying “You cannot see the ad. But the ad

can see you," popped out (Fingas, 2016). This can have a dual effect on the consumer. Either he/she will be completely discouraged or amused and intrigued.

3. Consumer's reactions towards (personalised) advertisements

Business-to-consumer online retailing forms the basis for the re-emergence of personalised marketing, which, through websites, has several key features both for the consumer and seller. It balances the discrepancy between conglomerates and small businesses, greatly increasing competition and consumer shopping choices. It reduces overhead and the number of middlemen, thereby lowering costs. It allows shopping 24-hour-per-day, seven-days-per-week from the privacy of people's home. It greatly increases the amount of information available to the consumer about products, including cost comparisons that previously would have taken much more effort to obtain. And, it allows huge numbers of customers to shop at particular Web stores and at the same time have business-to-consumer relationships and interact with each other (Gillenson, 2000). However, that also means that people are constantly bombarded with information, an infinite number of options and advertisements, creating an infinite global competition for businesses. Therefore, it can be a struggle to find what they are actually looking for. In the study of (Leppaniemi & Karjaluto, 2005), one of the main findings was that personalization was one of the factors to increase the willingness to accept the ads. It assumed that it would be the best solution to create personal user profiles for individuals based on their characteristics, behaviour and location. For that reason, companies are trying to evolve their skills in personalisation, making significant investments in it. From the Boston Consulting Group survey, respondents are recruiting employees dedicated to personalization programs and are spending more than \$5 million a year on personalization campaigns (BCG, 2017). At the same time, there is still a plenty room for improvement.

It is necessary for every business to understand whether their consumers are able to distinguish the different techniques marketers are using in online targeting and how this knowledge influences their perceptions of the product or service, view of the brands which is using them

and consequently, how it affects their buying behaviour. To online service firms embracing personalisation as part of their core competitive strategy, (dis)satisfaction with agent recommendations is not without consequences. First, it can have an immediate impact on sales transactions. While satisfied customers are more likely to be engaged and to proceed to placing orders, dissatisfied customers may simply leave from the website, even to a competitor, which is just a click away. Second, customer (dis)satisfaction may also affect their overall experiences with the service firm, which may in turn exhibit its impact on customer retention and long-term profitability (Gillenson, 2000).

With personalised advertising, customers are looking for relevant suggestions. (Kim and Huh, 2016) have determined that consumers who have high levels of perceived ad relevance, evaluate ads more positively. Shoppers just do not want to be constantly reminded of the products they've already bought or searched for, especially if the ads appear either too soon, too frequently, or too late in the process. To provide something that gains attention from a customer, companies need to use more sophisticated recommendation algorithms to offer complementary products or services instead of just the things the shopper has already browsed or bought (McKinsey&Company, 2017). That is the reason why marketers should have at least a basic knowledge of technology.

As a common digital-marketing feature has served retargeting, which is one of the most popular personalising technique. These reminders appear as ads on other websites the shopper visits or are delivered via email. Even though, this technique can be very effective, it can easily leave the customer feeling like he/she is being stalked which can have opposite outcome than the one businesses desire. Based on a study by (Van Doorn and Hoekstra, 2013), higher degrees of personalization in advertisements can generate feelings of intrusiveness which further results in negatively affecting purchase intentions. Consumers feel manipulated or deprived of their freedom of choice when perceiving a personalized advertisement inappropriately close to their preferences (King and Jessen 2010; Tucker 2012b; White et al. 2008), which can also have some psychological impact. Additionally, this has been further documented in survey research by Turow et al. where they discovered that 86% of young adults say they do not want tailored advertising if it is the result of following their behaviour on websites other than one they are

visiting. (Turow, J., J. King, C. J. Hoofnagle, A. Bleakley, and M. Hennessy (2009))” (Tucker, 2012). Therefore, there is a clash in users’ opinion, feelings and acts and it can be very difficult to please everyone because in research done by Infosys states that there is a desire for better personalisation, revealing that 31% of surveyed consumers say they wish their shopping experience was far more personalised than it currently is “(Nikki Gilliland, 2018). People say they want relevant results, and it is a fact that search engines results are getting more relevant. But better relevance is happening largely because of personalized results based on data collected about people's activities online.

Hence, consumers’ reaction to a customized message depends on both the degree of customization as well as the potential benefits of the offer. The study by (White et al., 2008) (as cited in Van Doorn and Hoekstra, 2013) present respondents with messages that differ in their amount and distinctiveness of personal information, the extent to which the use of information is justified, and the perceived utility of the message. Findings are that perceived utility of the ad mitigates the negative reactions to targeted messages, although this effect is lowered in presence of very characteristic and specific targeting revealing personal information. Given the points above, it can be derived that with a greater fit of consumer’s preferences and relevance of the targeted ad, consumer’s affection and sympathy towards the brand are increasing and from that follows his/hers buying intentions. On the contrary, low fit or incorrect targeting, possibly containing sensitive information is likely to cause irritation of the consumer and postpone or exclude purchase from a given brand.

It also important to realize that with improved quality of personalised advertising consumers are not only able to see more relevant ads but, there are two more negative consequences. With a more precise method of targeting, the number of ads might rise because, in equilibrium, they tend to disdain marginal ads although they may appreciate inframarginal ones (Johnson, 2013). Additionally, sometimes the improved information accuracy may actually lead consumers to receive ads that they prefer less than those which they received when targeting is less precise. Gillenson explains this as: “The recommendations need to be based on a better mix of the similarity between profile pattern (correlation) and profile height (distance measures) because currently we're also bombarded with simple volume-based offerings” (Gillenson, 2000). Simply

said, sometimes customers want to explore product, service or experiences which they haven't tried yet or might not even heard of before. (You have never read crime book but you discovered one and now you are addicted).

To conclude, it is still questionable if the governance legislations including GDPR or the EU Cookie law offers enough protection to the online users. Customers are thinking about their online presence more but it can be very difficult or even impossible to access and use the website for the user who doesn't agree with a collection of data and movement tracking. In other words, businesses are trying to use personalised advertising and reach its full potential together with data mining because it is very convenient for them. On the other hand, for consumers, it is a trade-off between tailor-made ads exactly for their needs and the demand for their personal data. Even though consumers are more aware of the current situation thanks to major data breaches in the last months, there is still a lot of actions that need to be taken. Firstly, bigger alertness and caution online, even at the cost of lower social media interaction for example. Secondly, from the point of view of businesses, they need to be more transparent, giving a consumer the ability to control privacy settings and of course, more cautious handling of data.

4. Research

4.1. Research model

This study explores the underlying relationships of personalised marketing, data usage and ad likeability in the context of online advertising. For managerial purposes, companies need to know what is the right level of personalisation for consumers and what can have the opposite effect compared to the desired result. Insights are necessary to show how advertisers can connect with the customers online using the advanced targeting methods in a way that can appeal to consumers. As online advertising grows more popular (Boris, 2012), there has been plentiful research relating to privacy and advertising in general, however, with the speed of technological development coupled with the advancement in algorithms which allows to match customer's wishes even though he/she does not know about them, the marketing sector

is struggling to keep up. Therefore, I believe this research will be a helpful insight into better understanding of customers' requests and attitudes towards personalised advertising.

4.1.1. Hypotheses

Based on the literature review in the practical part of this thesis, research on the impact of personalised advertising and its correlation with data usage was completed. With this intention, the model was developed to test the respondents' view on personalised advertising and to observe their behaviour. Furthermore, consumers' view on online privacy will be discussed together with the influence of various types of advertisements while being aware of data usage as well as not being aware of data usage. The model builds on the targeted online advertising research, that measures the effect of targeting on advertisement likeability and effectiveness.

H1: Personalising ads positively affects attitudes towards the ad and purchase intentions

In several studies from the literature review, it has been established that targeted advertisements evoke various kind of feelings. Therefore, one of this research's aims was to find out whether consumers consciously feel like they are more interested in the product when the ad is specifically targeted to them or on the contrary, it will discourage them. For this reason, the first hypothesis talks about the general attitude towards personalised advertising.

H2: With increasing personalisation of the ad, the attitude towards the ad is higher

Considering the fact that (Kim and Huh, 2016) have determined that consumers who have high levels of perceived ad relevance, evaluate ads more positively, the second hypothesis will try to prove this belief. It can be expected that the more cues of personalization the advertisement shows, the more it will be liked, however, the study of Van Doorn and Hoekstra (2013), showed that higher degrees of personalization in advertisements can generate feelings of intrusiveness which further results in negatively affecting purchase intentions. Therefore, the "level of personalisation" will be measured.

H3: Attitude towards the ad is higher for users unaware of data than for users aware of data usage

Although the formation of GDPR brought more awareness about being targeted in advertising and processing personal information, often users are not aware that their data have been used to create particular advertisements moreover, they might even question or are not aware of the ability of today's algorithms. From previous research, it has been established that people are more likely to like the ad in case they are not aware their personal data have been used. Thus, this study tests if the level of awareness on data usage in the shown targeted advertisement will impact the relationship between data usage in targeted advertisements and attitude towards the ad. The expectation is that there will be a difference in ad likeability when the consumer is either aware or unaware of the data usage.

H4: If the ad provides information about the resource of that data used, it moderates the relationship between perceived intrusion and advertisement attitude

The last hypothesis is connected with the message accompanying the advertisement. From previous research, it was concluded that when the advertisement informs the user about the origin of information and resource which the ad was based on, it will moderate users' feelings of intrusion and advertisement attitude. Therefore, this investigates user's attitude toward ad from this perspective.

4.1.2. Variables

For the purpose of confirmation or negation of these hypotheses, the following key variables will help to obtain the results:

The general attitude towards personalised advertising - measured by asking the participants "Do you feel that in a case the ad is specifically targeted on you, you are more likely to be interested in a certain product? with options "yes"/"no" as well as "How do you feel about receiving/seeing ads that are targeted based on your online activity?" with a 5-point scale for answers ranging from "strongly positive" to "strongly negative".

Ad likeability - after 4 types of advertisements shown, participants need to evaluate their attitude towards particular ad based on the question “How do you like advertisement A/B/C/D?” and assign points to each ad from 1 (being the best) to 5 (being the worst).

Awareness of data usage - in order to inspect the influence of data usage on ad likeability, this is an important variable. It was measured by the “How do you like advertisement A/B/C/D?” and the points were assigned to each ad from 1 (being the best) to 5 (being the worst) however, this time, the participant is alerted on the use of his/her data. Furthermore, the participants are shown advertisement with a description of data use and subsequently asked: “After taking this into consideration, how do you feel about the ad?” with answers “more positive”, “neutral” and “more negative”.

Other control variables

The frequency of social media use - participants were asked “How often do you use social networks?” with answers from “several times a day” to “never”

Privacy concern - the degree of privacy concern was measured by the question “Are you concerned with your privacy online?” with a 5-point scale for answers ranging from "I am highly concerned with my privacy" to "I am not concerned with my privacy at all".

Demographics

The following demographics are included at the beginning of the survey:

- Age (scale)
- Gender (male/female)
- Nationality (Slovak/Czech/Other)

4.2. **Research methodology**

This chapter covers the methodological approach used in this study. This study conducts empirical research based on a method of a quantitative questionnaire, in order to investigate the hypotheses and come to a conclusion. Firstly, the experimental task and design will be

discussed. Furthermore, I will elaborate on the methods used in this study. Secondly, the demographic composition of participants in the experiments will be covered.

4.2.1 Experiment design

As the elements required to conduct a field experiment have been previously discussed, the overall experiment design is summarized and elaborated upon in this section. The main purpose of this research, the impact on the dependent variable (consumer advertisement attitude) by manipulation of the independent variable (data usage) will be measured. Through forming this effect it will be possible to conclude what levels of data usage in targeted advertisements are favourable in terms of ad likeability. Furthermore, the influence of privacy concern factor is comprehended.

The study simulates a market research questionnaire asking participants to indicate their opinion as it offers a closer insight into personalised marketing. At the very beginning, the respondents are asked about their personal details such as gender, age and nationality together with their frequency of social media usage. Secondly, participants are asked their opinion on personalised marketing and whether they are worried about their online privacy. Thirdly, all participants are presented with a four types of advertisements (general, demographic, behavioural, profile targeted) which they need to evaluate. After their evaluation, they are notified about different usage volume of their personal data which was used for creation of that particular advertisement. Respondents then need to evaluate their likeability towards the ad again. Lastly, participants were shown advertisement on Facebook accompanied by message with reason for showing given advertisement and its origin. Thereof the user's point of view was observed after seeing the information about the ad origin.

4.2.2. Data collecting survey

The method of distribution of the survey mainly consisted of prompting friends, acquaintances and peers via Facebook and email in participating.

The target respondent for this survey was:

- young adult 18-27 years old
- student preferably at University of Economics, Prague
- located in Prague, Czech Republic

Table 1

Participant demographics	
Mean age	22 (min. 18, max. 27)
Gender	Male: 58 Female: 66
Nationality	Slovak: 76 Czech: 14 Other: 34
Social media activity	Several times a day: 120 Once a day: 4

As can be seen from the demographics for these final completed responses (*Table 1*), 124 participants successfully completed the study. Overall, men and women are about evenly represented in the sample. Participants are Slovak, Czech as well as other nationalities. The average age of 22 years represents the target group. As suspected, by choosing the target group to be a young adult from 18 to 27 years old, the 96,8 % of the sample use social media several times a day which means the topic of personalised advertising online is very relevant to them. Because the survey was widely spread via Facebook, frequent use of social media was expected in the sample.

4.3. **Data categorization**

The goal of the study is to determine how the audience perceives personalised advertising, whether If there is a difference in the degree of personalisation, the advertisement is more

appealing for the user and what is the correlation between data usage and targeted advertising. Finally, there is example of advertisement accompanied with message about resource of personal data. This is for the purpose of observing if audience perceives in this case ad more positively or negatively. To measure these factors, an online questionnaire was created and on the example of advertisement of a bakery, different types of personalisation were shown.

The participants of the research are shown four types of advertisements:

1) General ad - no targeting (*Image A*)

- no data of the user showed or used to create the ad
- promotion of discount with the slogan “There’s 15% off on our baked good and coffee. Come and get it”
- logo of the company, website, address

2) Demographic/ Personal targeting (*Image B*)

Advertisements that target a certain group based on self-reported data - For example gender, age, name or in this survey, a student of the certain university.

- demographic data used to create the advertisement
- promotion of discount with the slogan “VŠE students get 15% off on our baked good and coffee. Come and get it”
- logo of the company, website, address

3) Behavioural targeting (*Image C*)

Websites are capturing visitor data and using that information to provide visitors with advertisements that are specifically relevant to their needs and interests.

- in this case, respondent is targeted based on geographical location which he/she is using the platform, which is showed by the distance from the bakery “VŠE students get 15% off on our baked good and coffee. We are less than 5 minutes away from you. It will still be fresh”
- by that, the consumer realises that the bakery is also physically really close and feels more engaged with the ad
- shows the logo of the company, website, address

4) Profile targeted ads (*Image D*)

Targets users based on self-reported data, digital exhaust and profiling data. It can also use all the mentioned data to create predictions about the user through algorithms.

- in this research there are simulated predictions which could be assumed by the user's profile as a VŠE student, in particular, the early start of the classes "Feeling tired? Got an early morning class? We got you covered. VŠE get 15% off on our baked good and coffee" for the purpose of addressing the predicted need of the respondent
- shows the logo of the company, website, address and greeting "VŠE student"

Lastly, respondents are shown one more example of advertisement placed on social media Facebook (*Image E*). The advertisement is an profile targeted ad and it is also showing message with information about the resources which was the ad based on : "This ad has been created based on your activity and information from a third party". The goal is to find out whether users are feeling more secure online after seeing this information and they have positive attitude towards the advertisement or on the contrary they are discouraged and feel that the ad is even more intrusive.

4.4. Data Analysis

The data from the survey has been collected and analysed. Several statistical tests are conducted with the intention to create insights on the advertising campaign and its impact. These insights should either confirm or negate the hypotheses.

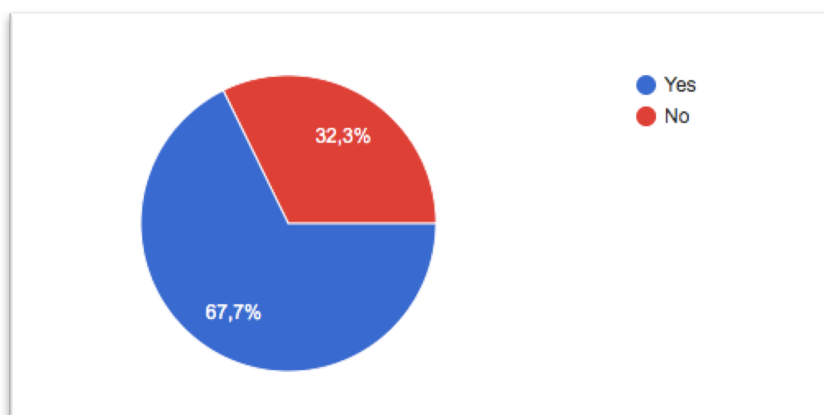
Within this research, due to size and other limitations, there it isn't a random sample from clearly defined population - consequently, no tools or inference statistics (statistical hypothesis and confidence interval) may be reasonably employed. For this reason, only descriptive statistics will be used to judge Hypothesis 2 and 3 of interest. Strictly speaking all conclusions are to be drawn only to the analysed set. The results thus should be seen as a support in favour of the hypotheses of the interest (or against it).

Personalised ads affecting attitudes

In order to investigate if the “H1: Personalising ads positively affects attitudes towards the ad and purchase intentions” can be supported the research question “Do you feel that in a case the ad is specifically targeted on you, you are more likely to be interested in a certain product?” was asked the respondents. There are many point of views how this hypothesis can be approached and by answering this question we should be able to conclude whether consumers consciously feel like they are more interested in the product when the ad is specifically targeted at them or on the contrary, it will discourage them. In many cases, personalised ad can have contradictory effect than requested.

However, on the pie chart (*Figure 2*) it is possible to see that the results from the survey have confirmed that more respondents, 67,7% (84 people) which is represented by blue colour, feel like personalised ads are more appealing to them than general ads. Although, the portion of respondents who think they are not attracted or can not be manipulated is still quite large - 32,3% (40 people) represented by red colour. It is disputable if this is just subconscious statement and it would be the same in reality.

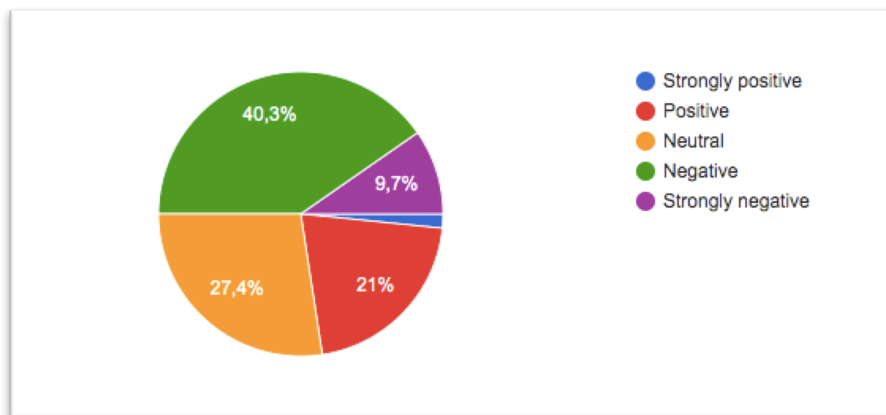
Figure 2 – Interest in certain product in case of specifically targeted advertisement



Source: own research

As shown above, there are various kinds of personalising with low to high data usage. Therefore, the next aspect for this hypothesis which should be considered is the opinion of consumers on degrees of personalisation. For this reason, the next research question “How do you feel about receiving/seeing ads that are targeted based on your online activity?” was given to the respondents. Here, the respondents had an option to show their attitude on 5 point scale from “strongly positive” to “strongly negative”. Compared to the previous question where respondents clearly stated that the ad is more appealing to them when it is personalised, this question opens an discussion about the resource of the information on which is the ad based on. As can be seen at *Figure 3*, when asked about how users feel about the information being based on their online activity, over 40% of respondents described their feeling (represented by green) as negative and 9,7% strongly negative (represented by purple). A high proportion of participants have stated that they feel neutral about this information being used (represented by yellow). This method of targeting was identified as “positive” and “strongly positive” only by 26 and 2 (out of 124) respondents respectively.

Figure 3 – Feelings of respondents about receiving targeted ad based on their online activity



Source: own research

Level of personalisation

Within the second hypothesis, it was hypothesized that with increasing personalisation of the advertisement, the attitude towards the ad is higher. In order to test this, respondents of the survey were shown four types of ads, all personalised differently with gradually increased level of personalisation (General ad, Demographic, Behavioural and Profile targeted, as previously mentioned). Respondents were supposed to evaluate their attitude towards particular ad and the responses were recorded into numerical values. From their evaluation on a 5-point scale which signifies number 1 being the best and 5 the worst, the average evaluation for each advertisement was calculated.

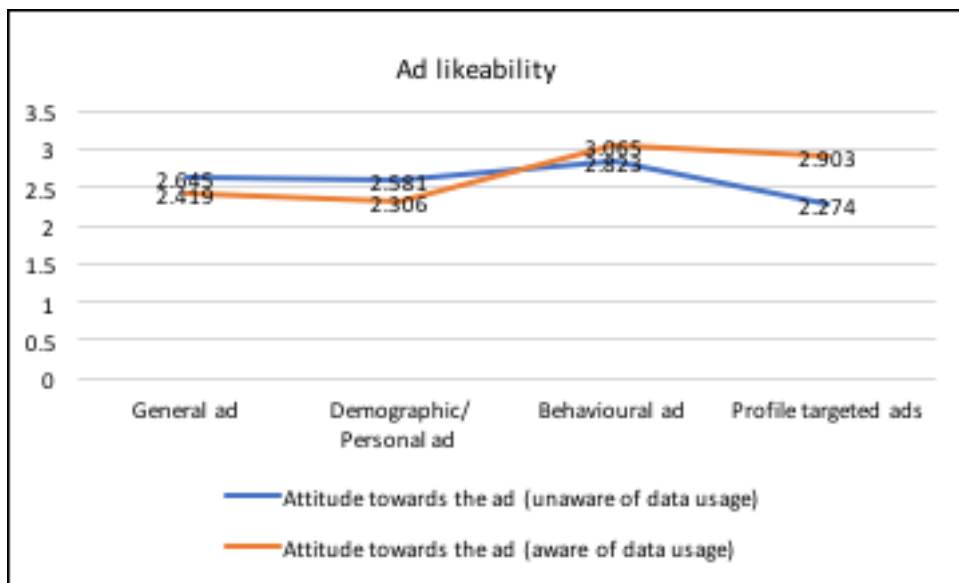
As shown in *Table 2*, which shows mean answers of 124 respondents, the following tendencies were recorded. Firstly, when respondents were unaware of data usage, the most popular ad was the profile targeted ad (with the lowest value of 2,274). Subsequently, the respondents were informed that general and demographic ads are low personal data usage advertisements whereas behavioural and profile targeted are high personal data usage advertisements. When looking at the ad likeability for all four ads overall, it can be found that the average likeability for the unaware state is 2.581, and for the aware state it is 2.673. Even though, this might not seem as a big difference, when looking closely, *Figure 4* illustrates the immediate change in customer's perspective on the advertisement after the data usage. The blue curve representing the attitude towards the ad while unaware of data usage had generally lower evaluation of the ad likeability (therefore the numerical value was higher) for the general ad and demographic ad. The attitudes towards the ad were the best for profile targeted ad and the worst for the behavioural ad. After respondents are informed and aware of data usage, represented by orange curve, there is an increase recorded in the values of behavioural and profile targeted, which means attitudes towards them have worsened and on the other hand there is a slight decrease in the values of general and demographic which signifies minor increase in the attitude towards the ad.

Table 2 – Attitude towards the ad

Type of advertisement	Attitude towards the ad (unaware of data usage)	Attitude towards the ad (aware of data usage)
General ad	2.645	2.419
Demographic/ Personal ad	2.581	2.306
Behavioural ad	2.823	3.065
Profile targeted ads	2.274	2.903
Overall	2.581	2.673

Source: own research

Figure 4



Source: own research

Ad likeability

The same testing method as for the hypothesis 2 can be also applied for hypothesis 3 “Attitude towards the ad is higher for users unaware of data than for users aware of data usage”. It investigates the ad likeability, again the 5 point scale signifies number 1 being the best and 5 the worst. As mentioned above, no tools or inference statistics (statistical hypothesis and confidence interval) may be reasonably employed because of limitation of this research - there isn't a random sample from clearly defined population. Therefore, the data have been analysed by frequency distribution tables. In order to do that, quantiles have been indicated. As can be seen at *Table 3* , this was done through intervals on the scale from 1 to 5 to better analyse quantitative data.

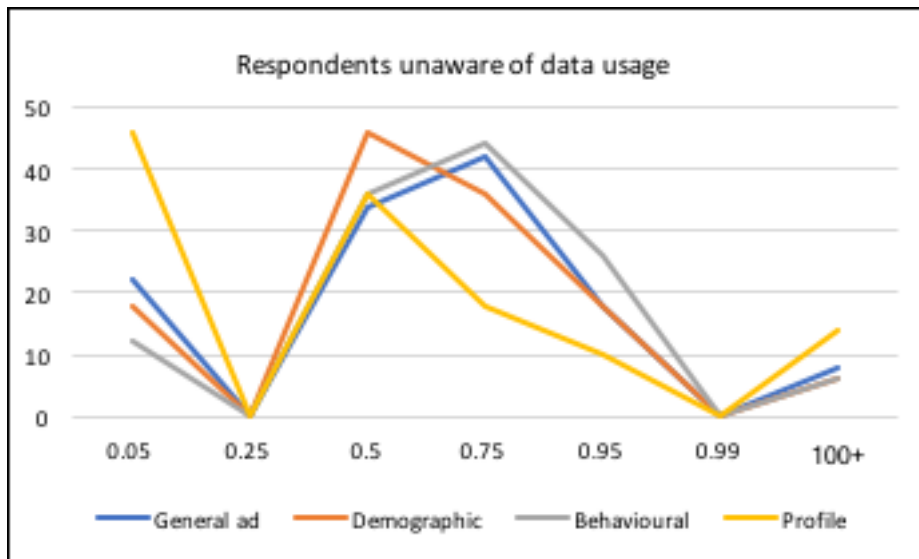
Table 3

quaintiles	intervalles
0.05	1-1.19
0.25	1.2-1.99
0.5	2-2.99
0.75	3-3.9
0.95	4-4.79
0.99	4.8-4.99
100+	5+

Source: own research

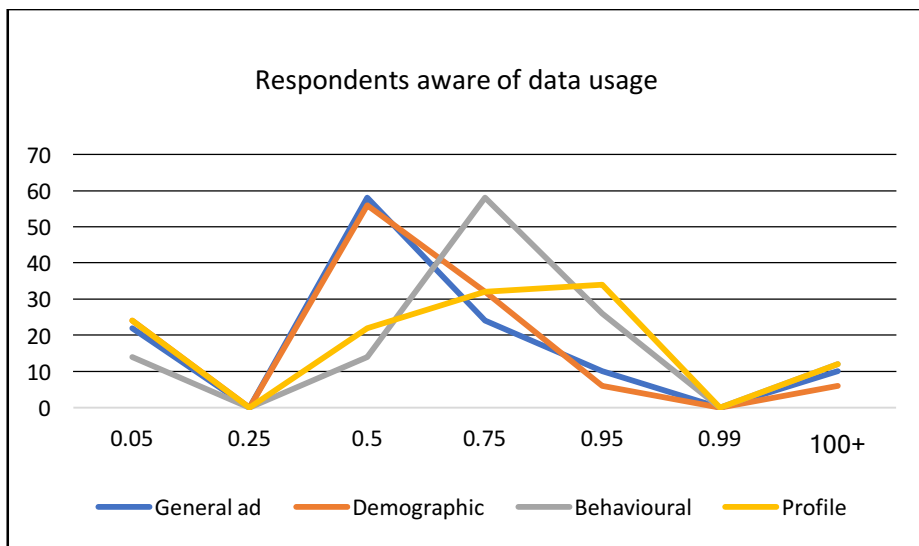
Based on that, the frequency was calculated and frequency histograms for both respondents when unaware of data usage as well as respondents aware of data usage, were created (see *Figure 5* and *Figure 6*). As can be seen, overall, the frequencies in the *Figure 5* are of a very similar trend for all of the advertisements, with the peak value of 46 for the Demographic ad represented by orange line. On the other hand, the distribution of frequencies in *Figure 5* is more uneven. This trend can be considered as a result of the more negative attitude towards the high personal data usage. The most significant change within the four ads was recorded with the profile targeting ad, represented by yellow colour, which in fact, uses the highest amount of users' personal data.

Figure 5 – Frequency of answers regarding ad evaluation



Source: own research

Figure 6 - Frequency of answers regarding ad evaluation

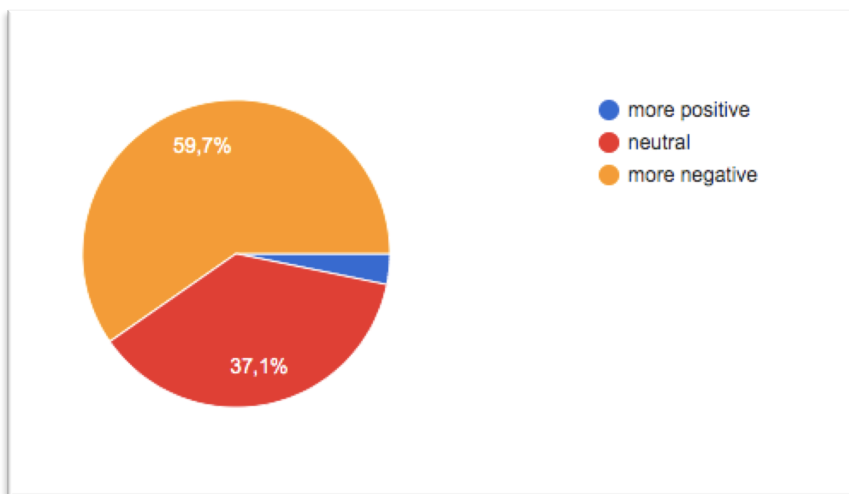


Source: own research

Message accompanying the ad

The fourth hypothesis “H4: If the ad provides information about the resource of that data used, it moderates the relationship between perceived intrusion and advertisement attitude” is drawn up and tested. The respondents were shown a Facebook advertisement (*Image E*) with accompanied message about the origin of data used. They were supposed to indicate whether after seeing this information they are feeling “more positive” about the ad, “more negative” or “neutral”. As can be seen in the *Figure 6*, out of 124 respondents, the majority, 74 respondents, represented by orange, reported viewing the ad as more negative, which can be explicated as ‘annoying’, ‘intrusive’, and ‘creepy’. Quite large proportion of people, 46 represented by red, reported that they view it as a neutral, the indifferent feelings of participants towards the manipulated advertisements and includes codes such as ‘neutral’, ‘nothing’, and ‘normal’. Just 4 people, represented by blue, stated that this message made them feel more positive about the ad, hence the ad likeability was increased.

Figure 7 – Feelings regarding Facebook ad accompanied with message about data usage



Source: own research

4.5. Research summary

The objective of this research was to analyse the relationship level of personalised marketing, data usage and ad likeability in the context of online advertising, in other words, how do these factors influence the consumer behaviour. The goal was to determine what is the right level of personalisation with the intention to be appealing and relevant for consumer and at the same time not seem intrusive and creepy. Based on previous literature studies related to advertising, privacy and data usage several hypotheses and research questions were composed. These hypotheses were incorporated into a research model that was used a guideline.

Firstly, it was expected that personalising ads positively affects attitudes towards the ad and purchase intentions. This expectation was based on multiple studies, for example study by (Kim and Huh, 2016) which has determined that consumers who have high levels of perceived ad relevance, evaluate ads more positively. Secondly, it was assumed that with increasing personalisation, the attitude towards the ad is higher. This hypothesis was created on base of study by (Leppaniemi & Karjaluo, 2005) , where one of the main findings was that personalization was one of the factors to increase the willingness to accept the ads. Thirdly, it was hypothesised that attitude towards the ad is higher for users unaware of data that for users aware of them. This was based on more conclusion for instance (Iacobucci, 2006) research, which states that awareness of personalized recommendations may actually lead to customer dissatisfaction, even annoyance or irritation. Lastly, based on of (White et al., 2008), it was expected that perceived utility of the ad mitigates the negative reactions to targeted messages.

4.6. Research findings

The main goal of this research project is to find out which targeting strategy using which kind of data is most effective in generating positive advertisement attitudes. In other words, to what extent personalising positively affects customer's attitude towards the ad and their behaviour. The four hypotheses were tested by data analysis. Moreover, due to the lack of sample from a clearly defined population, no tool or inference statistics- statistical hypothesis and confidence

interval, were employed. Under these circumstances, all conclusions are drawn only to the analysed set.

The results from testing the first hypothesis (“Personalising ads positively affects attitudes towards the ad and purchase intentions”) indicated firstly that the majority of people tested consciously feel like personalised ads are more appealing to them than general ads. However, the answers to the second question about targeting based on people’s online activity demonstrated that nearly half of the respondents feel negative or strongly negative about that. In this case, the important factor is if the methodology does not falls short and respondents did feel connected enough to this situation. Given these points, it is possible to say that the view on personalising depends on the strategy used for the ad to be personalised, methods of data collection and data usage. Therefore, in summary, the first hypothesis cannot be supported due to the fact that from the research done, even though consumers feel like they are more attracted to personalised ads, the attitudes towards them depend predominantly on the methods used for personalising and its degree.

From the descriptive statistics process of testing hypothesis two (“With increasing personalisation of the ad, the attitude towards the ad is higher”) it was found the following. First, in the round of asking about the attitude towards the ad, when respondents were unaware of data usage, the ad likeability had a tendency to increase from general ad to personal targeted ad. The only exception was the behavioural ad which was liked the least. Second, as the people were informed about the particular data usage of ads, the attitudes towards them changed rapidly. In this case, general and demographically targeted ones, low data usage ads, were more popular than the behavioural one and profile targeted ad. Nevertheless, the attitude towards the ads didn’t seem to have any general trend in this case and the evaluation of the ads wasn’t distributed according to the personalisation degree. With this in mind, the second hypothesis can not be supported.

Using data which were the outcome of the same testing as for hypothesis 2, hypothesis 3 (“Attitude towards the ad is higher for users unaware of data than for users aware of data usage”) investigated ad likeability. From the frequency distribution tables, it was determined that

overall, the mean attitude towards the ad was lower (better) when the respondents were unaware of data usage. However, the difference between them (2,581 and 2,673) is not significant. If comparing the individual types of advertisements, after respondents were informed about the low and high data usage of the advertisements' likeability increased/decreased accordingly. That is to say, the ad likeability of high data usage ads decreased and the ad likeability of low data usage ad increased. This appeared in all of the ads. It can be concluded that the low-data usage strategies are more effective in terms of generating positive advertisement attitudes. In addition, it can be established that data usage in targeted advertisements online is negatively affecting advertisement attitudes. It is, therefore, possible to confirm, that specifically for this analysed set, hypothesis 3 is confirmed.

At last, it was hypothesized that If the ad provides information about the resource of that data used, it moderates the relationship between perceived intrusion and advertisement attitude. It was predicted that people will feel more assured about their data used for personalised advertising when they know where it comes from. However, after showing respondents the example of Facebook advertisement accompanied with a message about the origin of that used, almost 60% of respondents saw it as more negative together with 37, 1% who saw it as neutral. This can be also caused by the fact that the message did not contain information about possibility to set adjust data usage of their personal data and privacy settings. As only 3,2% of people perceived this information as positive, this hypothesis cannot be supported.

The outcomes of these hypotheses are summarized in the table below (*Table 4*). Even though H1, H2 and H4 are not supported, it can still be established that personalised advertising can have a great positive effect on attitude towards the ad and purchase intentions in many cases. This also applies in case of increased personalisation, when the increased personalisation can make the ad more appealing for the consumer. Moreover, the information regarding the source of data accompanying the ad can have a positive influence however, it is more likely when it also contains the possibility of privacy and data usage settings.

Table 4 – Summary of hypotheses

Hypotheses	Description	Outcome	Result
H1	<i>Personalising ads positively affects attitudes towards the ad and purchase intentions</i>	not supported	The attitude towards ad depends predominantly on the methods used for personalising and its degree
H2	<i>With increasing personalisation of the ad, the attitude towards the ad is higher</i>	not supported	The ad likeability is not always directly proportional to the degree of personalisation
H3	<i>Attitude towards the ad is higher for users unaware of data than for users aware of data usage</i>	supported	Attitude towards the ad is higher for users that are aware of the data usage than for users that are unaware of data usage
H4	<i>If the ad provides information about the resource of that data used, it moderates the relationship between perceived intrusion and advertisement attitude</i>	not supported	Negative effect of the message accompanying Facebook advertisement

Conclusion

In the theoretical part of this paper, various subtopics within personalised advertising are discussed. Insights from literature review should help to understand what is the impact of personalised advertising as well as how can data usage affect its possible impact and the behaviour of the consumer. The goal was fulfilled as the personalised advertising and its strategies were defined, the consumers' data usage privacy concerns were discussed as well as generally, consumers' reaction towards personalised advertising was observed.

Next, the practical part of the paper comprised of research which collected quantitative data via survey. These data were analysed and four hypotheses were formulated. This research comprised 4 types of targeted advertising - general, demographic, behavioural and profile targeted advertisements in order to be able to make the best judgment and observation of consumers' attitudes and behaviour. The main goal of the practical part was fulfilled, as the relationship between the level of personalised marketing, data usage and ad likeability was observed and deeper investigated. Based on results of the survey, all of the respondents' answers were considered and subsequently, final outcome was concluded. In this case, hypotheses were either supported or not.

Even though this research and subsequently its outcomes are not done on a random sample from a clearly defined population, the sample of respondents from this research can serve as a guideline for creating personalised advertising campaigns. Marketers are able to retrieve insights on the effect data usage has on ad likeability and how people perceive advertisements with certain data types.

Finally, the study brings to light the lack of academic research on consumers' perceptions and processing of personalised advertising in the era of rapid technological development. The experiment results question the actual effect of personalised advertising, the degree of influence of data usage and the privacy concern connected with companies trying to get to customers as close as possible.

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Annexes

A. - Survey

Questions explanation:

> Q7 until Q15 showed pictures of advertisements

> Q15 showed the social media ad tailored to the specific audience with accompanied message

Questions:

Q1 - Gender

Q2 -Nationality

Q3 - “How often do you use social networks?”

Q4 - “Do you feel that in a case the ad is specifically targeted on you, you are more likely to be interested in a certain product?”

Q5 - “How do you feel about receiving/seeing ads that are targeted based on your online activity?”

Q6 - “Are you concerned with your privacy online?”

Q7 - “How do you like advertisement A?”

Q8 - ”How do you like advertisement B?”

Q9 - “How do you like advertisement C?”

Q10 - ” How do you like advertisement D?”

Q11 - “How do you like advertisement A?”

Q12- ”How do you like advertisement B?”

Q13 - “How do you like advertisement C?”

Q14 -” How do you like advertisement D?”

Q15 - “After taking this into consideration, how do you feel about the ad?”

Image A



Image B



Image C

The advertisement features a top-down view of an assortment of baked goods, including bagels, croissants, and bread rolls, arranged around a central text area. A small white cup filled with coffee beans is positioned near the bottom right. The background is a solid dark color, making the golden-brown pastries stand out. The text is centered and uses a clean, sans-serif font.

**VŠE Students get 15% off on
our baked goods and coffee.**

We are less than 5 minutes away from you. It will still be fresh.

Sweettooth www.sweettooth.cz | Seifertova 941, 130 00 Praha 3

Image D

This advertisement is visually identical to Image C, featuring the same arrangement of pastries, coffee, and dark background. The central text is reworded to address student fatigue and early morning classes.


**Feeling tired?
Got an early morning class?**

We got you covered. **VŠE students** get **15% off** on our
baked goods and coffee.

Sweettooth www.sweettooth.cz | Seifertova 941, 130 00 Praha 3

Image E


Sweet Tooth Bakery Prague
20 hours ago





**Feeling tired?
Got an early morning class?**


We got you covered. **VŠE students** get **15% off** on our baked goods and coffee.

SweetTooth www.sweettooth.cz | Selsertova 941, 130 00 Praha 3

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