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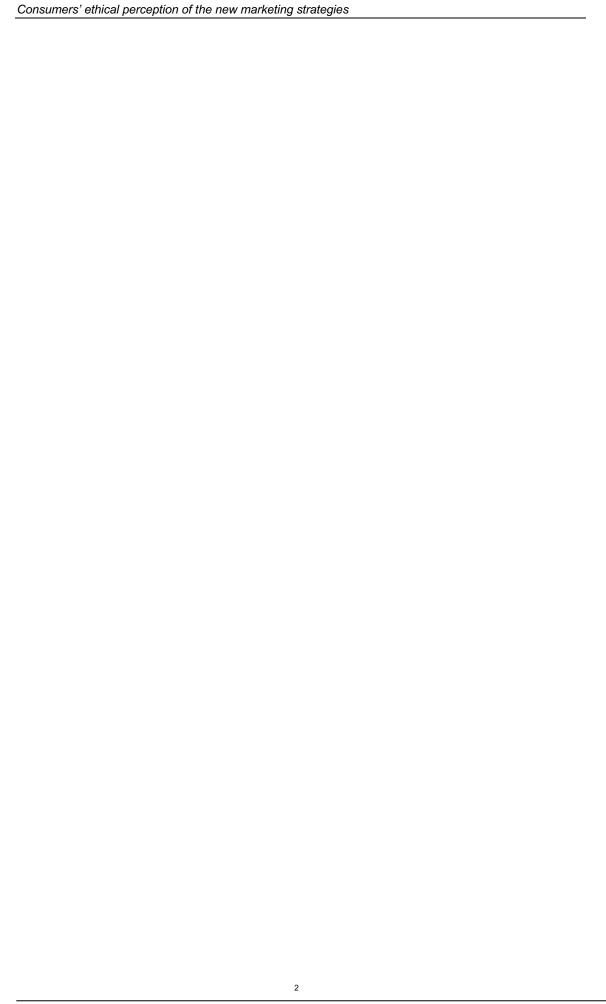de Ciències Socials i de l'Empresa

GENERATION Z CUSTOMERS' ETHICAL PERCEPTION OF THE NEW MARKETING STRATEGIES

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Abstract

The rapidly developing technologies of the information era are placing powerful tools in the hands of all organizations, and decision-makers often find themselves faced with unprecedented ethical issues and moral standards surrounding their practices.

This study concerns organizations who plan on integrating two marketing strategies with increasing potentials; Big Data and Neuromarketing. Through a qualitative investigation of ethical perceptions, this paper offers an insight for organizations about the different concerns and arguments their Generation Z customers might have regarding their marketing ethics. Their approaches are categorized and analyzed under the normative ethics theories; deontology and utilitarianism. The extracted results offer suggestions from both viewpoints that should be kept in mind by organizations before employing these techniques.

Keywords: marketing ethics, Big Data and Neuromarketing ethics, Generation Z, normative ethics of marketing.

Resumen

Las nuevas tecnologías de la era de la información están poniendo poderosas herramientas en manos de todas las organizaciones, y los tomadores de decisiones a menudo se enfrentan a problemas éticos y estándares morales sin precedentes que rodean sus prácticas.

Este estudio es de interés para organizaciones que planean integrar dos estrategias de marketing con potenciales crecientes; Big Data y Neuromarketing. A través de una investigación cualitativa de las percepciones éticas, esta investigación ofrece información sobre las diferentes preocupaciones y argumentos que los clientes de la Generación Z pueden tener con respecto a la ética de marketing. Sus enfoques se categorizan y analizan bajo las teorías de la ética normativa; deontología y utilitarismo. Los resultados extraídos ofrecen sugerencias desde ambas teorías que las organizaciones deben tener en cuenta antes de emplear estas técnicas.

Palabras clave: ética del marketing, ética del Big Data y Neuromarketing, ética normativa del marketing.

Resum

Les noves tecnologies de l'era de la informació estan posant poderoses eines en mans de totes les organitzacions, i els prenedors de decisions sovint s'enfronten a problemes ètics i estàndards morals sense precedents que envolten les seves pràctiques.

Aquest estudi és d'interès per a organitzacions que planegen integrar dues estratègies de màrqueting amb potencials creixents: Big Data i Neuromarketing. A través d'una

recerca qualitativa de les percepcions ètiques, aquesta investigació ofereix informació sobre les diferents preocupacions i arguments que els clients de la Generació Z poden tenir respecte a l'ètica de màrqueting. Les seves aportacions es categoritzen i analitzen sota les teories de l'ètica normativa; deontologia i utilitarisme. Els resultats extrets ofereixen suggeriments des de les dues teories que les organitzacions han de tenir en compte abans d'integrar aquestes tècniques en la seva estratègia.

Paraules clau: ètica del màrqueting, ètica del Big Data i Neuromarketing, ètica normativa del màrqueting.

Contents

1. Introduction

Of all the management fields, marketing is probably that which seems the most paradoxical when it comes to consider its ethical aspect (Nantel & Weeks, 1996). There is often controversy around marketing practices used by corporations to achieve certain desired outcomes. The two main concerns for customers are the invasion of privacy and possible limitations to their free-will by manipulation.

Neuromarketing and the use of Big Data are two new marketing strategies of the 21st century that are directly associated with these two already existing ethical concerns for customers and society. This research, carried out in a time these strategies are on the rise, attempts to explore deeper into these concerns and provide the point of view of Generation Z consumers in the face of some ethical dilemmas corporations will find when applying neuroscientific knowledge and Big Data to marketing.

By 2025, it is estimated that 463 exabytes of data will be generated each day globally. Nowadays, consumers create data with each one of their movements, whether online or offline, and are often unaware of the purpose they serve or even the techniques applied to gather them. This is how Big Data is unleashing a necessity for a change in how ethics has to be perceived (Zwitter, 2014).

Furthermore, Big Data is not only about recollecting data generated during purchases or finding patterns in external and observable behavior anymore. It joins the rise of Neuromarketing. Given the breakthrough of the neuroimaging techniques, it seems to be possible to "see" the thoughts, reactions and emotions of consumers (Prieto, 2011). This raises privacy-related doubts from the customer's point of view with regard to marketing research, and liberty-related doubts when it comes to using the information generated from this data to manipulate said thoughts, reactions and emotions for marketing purposes.

Though, when it comes to the ethical discussion around this topic, it must be considered, not only in the case of Neuromarketing and Big Data strategies, but for all marketing practices, that the ultimate goal of marketing is to satisfy the needs and desires of customers by offering and distributing the products or services that best suit them. In the case of non-profit organizations, marketing purposes go further than satisfying material needs; they often promote social acts aimed to resolve the problems of society, and can also maximize their efficiency through the use of Neuromarketing and Big Data, despite the controversies these strategies may be involved in.

This ethical dilemma around whether or not corporations should implement Neuromarketing and Big Data practices that might be dubious about their implications

for the privacy or the free-will of customers, but serve the ultimate goal of maximizing their well-being, is the dilemma to which normative ethics offers two possible approaches; the utilitarian approach and the deontological approach.

The former, utilitarianism, considers an action ethical if it maximizes the greatest number of positive repercussions for the greatest number of people while at the same time minimizing negative repercussions to the smallest number (Mill, 1901). For Neuromarketing and Big Data, this would mean that they are justified to invade customers' privacy and manipulate their behaviors for the benefit of society, if they are contributing, in this manner, to a greater good.

The latter approach, deontology, provides a simpler view of distinguishing unethical acts. It states that an action's morality must be judged strictly based on whether it follows the rules of what Kant described in 1788 as duty, or a moral obligation, regardless of the consequences of the act. No single right should be violated, nor liberty limited in the name of a greater good; meaning for Neuromarketing and Big Data that their practices will be always unethical if they attempt to invade customers' privacy and manipulate their behaviors, no matter the greatness of the outcome they'll achieve.

Previous research by Nantel and Weeks in 1996 suggests that marketing, by its definition, is grounded on a utilitarian approach to ethics, but it is possible, and often necessary, for managers to also develop a deontological approach. However, this ethical dilemma has not been investigated from the point of view of the customers.

This study aims to describe the ethical implications of these new marketing strategies of the 21st century and determine whether customers consider a utilitarian or a deontological approach to be more appropriate for corporations to implement in these practices. Its expected contribution is to use this information as the basis for an ethical guide for corporations, given that managers will face situations where ethics, the law and self-interest are inconsistent (Smith, 2001). This investigation is especially relevant in this present time period when such strategies allow a transition towards a type of interaction with the market where individuals feel a loss of control in the face of the advanced resources corporations have at their disposal.

Another motivation behind the study is the personal inquisitiveness about whether it is possible to achieve a consensus when it comes to an ethical issue, by examining arguments from both sides and responding to their concerns, since this would be the starting point to develop a guide for normative marketing ethics.

Structure of the research

The first part of this study establishes the framework for the research question. Information is gathered from previous researches surrounding marketing ethics and the two approaches provided by normative ethics; deontology and utilitarianism. These approaches are then applied to the practices of Neuromarketing and Big Data to analyze their positions in relation to the ethical concerns about these strategies.

Once given this first base, the field research begins. It is decided, for reasons stated in the methodology, that a qualitative research is the most appropriate for this study. Two different types of qualitative research are employed, a series of interviews and a posterior focus group with six selected participants.

The initial interviews are done in order to achieve the first objective of the study by discovering the type of ethical code organizations must employ when faced with ethical dilemmas involving the new marketing strategies of the 21st century. This is achieved by presenting two hypothetical cases to the participants where a company faces an ethical dilemma and has two possible actions it can take; one action dictated by a deontological ethics code and one action dictated by a utilitarian ethics code.

The second part of the field work aims to gather the insights behind the perceived ethicality of these new strategies and the motives behind the elected type of ethical code for corporations, answering to the objectives two and three. A a series of follow-up focus groups are done with the expected result of providing an understanding of the reasonings each participant makes before deciding which ethics code is more appropriate.

Finally, the results of both methods are analyzed, and conclusions are drawn from the findings in order to answer the global research question.

2. Theoretical Framework

2.1. The framework of marketing ethics

The ethics of marketing has provoked many debates, both in public opinion and within communities of marketers (Nantel & Weeks, 1996) since the beginning of the marketing practice. Therefore, it is relevant to start this study by examining how this ethical debate has been shaped so far and reviewing the main topics of concern when it comes to the middle-class consumers' ethical perception of marketing.

Within the world of business, the advertising sector was the first to develop an "ethics code" to apply to their practices. It was 1928 when this concept first emerged, a time where technology surrounding advertisement was incomparable to today's market but didn't stop managers from questioning the extent to which their persuasion techniques were ethical. This is reason to believe that, though this study will later focus on specific ethical concerns around Neuromarketing and Big Data, any strategy aimed at controlling behavior will be subject to similar moral criticism.

In 1957, in his book *The Hidden Persuaders,* Vance Packard described marketing as *unethical* for the way it is practiced, arguing that "by appealing to the deeper layers of the public's subconscious drives (and manipulating them), marketing gurus sought to increase the sales of their products in an attempt to stave off economic stagnation and fuel capitalism by creating a consumer driven society" (Packard, 1957).

In the face of a growing expectation for an ethical reconsideration or social responsibilities from companies in the 1950s, there were still economists like Theodore Levitt who exempted marketers from such moral responsibilities by stating that the number one goal of a business is profits, and not charity. He went so far as to suggest such moral preoccupations would be *dangerous* for business, since they would reinvent the companies' duties, influences – and eventually powers, and transform them into a twentieth-century equivalent of a medieval Church (Levitt, 1958).

Today, in the twenty-first century, this is proven wrong (Babin et al., 2000). Evidence suggests that ethics is good for business, having a positive influence on both sales and the company's work environment. The importance organizations give to ethical issues has gained significant consumer attention during this century. There is visible public concern, not only for individual privacy, but also for aspects like social inclusion or the communication of good social values.

The public wants to see organizations give voice to society's problems and use their resources and influence to resolve them. In case of observing the contrary, they will protest, and they will do it more efficiently than ever given the possibilities of expression and diffusion the online networks offer them. This explains why good ethics is good business for 21st century's organizations, but what defines good ethics in marketing?

It is evident that any marketing strategy that serves other interests than the consumer's, the society's or the environment's benefit, such as inducing, through strategies without an express consent, a commercial target to buy a good or service not required by them or that may do them harm, is morally unacceptable (Garavito et al., 2016).

On the contrary, a marketing strategy is ethical if it brings customers the products and services that meet their needs, while at the same time respecting their privacy and freedom to make their own decisions about whether to acquire it or when.

However, it must be taken into account that the ethics of our society at an earlier time may differ from what we regard to be right today (Bartels, 1967). Researchers have described the 21st century as a time of "liquid modernity" (Bauman, 2000). This concept refers to a period of constant change, of *liquid ideas* rather than solid, indisputable ones. We, therefore, have reason to believe it is also a period of *liquid morals*, meaning a reconsideration of ethical values is inevitable in a society that's in constant development.

The technologies that allow practices like Neuromarketing and Big Data to be used by organizations also call for a reflection about the suitable ethical approaches when implementing them. The answer to this will depend on what is more valued by the 21st century's average middle-class consumer; their privacy, freedom, free-will, or their ultimate satisfaction or happiness.

2.2. Ethical controversies of Neuromarketing

The neurosciences aim to understand human behavior by studying the brain's reactions to certain stimuli and offering explanations for different sorts of conduct. Neuromarketing, first defined by Ale Smidts in 2002, applies this scientific procedure to the marketing field in order to investigate which factors achieve the most positive customer reaction and include them in their strategies.

It is not difficult to see how some customers might perceive this practice to be dubious about its ethical implications. The ethical concerns discussed so far by marketing

professionals and the general public can be summarized by dividing them into three large categories;

Privacy

Neuroimaging tools allow organizations access to the subject's unconscious responses and emotions, which, as previous research demonstrates, causes 95% of consumers' decision-making processes (Mahoney, 2003). Therefore, information gathered with neuroimaging will be an enormous insight for marketing research that is unobtainable from traditional methods like surveys or focus groups (Isa et al., 2019) that rely on the individual's contribution, honesty, and ability to respond. The first concern about privacy arises from this point, given the consumer's discontent about an organization having access to brain processes they cannot control or their ability to observe preferences and emotions the consumer themselves is not aware of. As W. Sinnott-Armstrong, philosopher specialized in ethics, states for the Harvard Business Review, as customers, we typically accept that our purchase behavior is public. However, we think of our brains and our thoughts as private.

Consent

For this second point it is relevant to mention that the most potent techniques whereby behavior is altered for marketing purposes are techniques applied without agents' knowledge, usually involving environmental manipulations (Levy, 2009). Hence the concern about the lack of an informed consent where the subject has a complete understanding of the techniques involved and their implications.

This issue is quite similar to issues raised by subliminal advertising and is easy to see in experiments where subjects are exposed to a certain product, either by visual flashes or by auditory stimuli, without their express knowledge. It can be argued that the autonomy and informed consent of customers have been compromised by frequent exposure to a particular product, which in the claim of ethic critics, is wrong and unethical (Isa et al., 2019).

Free-will

Finally, concern about limitations to free-will or autonomy arises from a combination of the two concerns mentioned above, given the possibility of intervention to the subject's subconscious decision-making processes, through techniques meant to manipulate them without the subject's knowledge. Some people claimed that the use of neuroscience in marketing somehow had introduced companies to a 'buy button' that can read the mind of potential consumers and influence their buying decisions (Isa et al.,

2019). The idea behind this concern is that the existence of such a 'buy-button' or the possibility for organizations to create it using Neuromarketing techniques would ultimately give them the power of inducing any sort of consumption and override the subject's free-will.

There is an extensive debate surrounding our capacity to exercise of free-will under a capitalist society. The one thing that is clear is that all marketing actions are about influencing people (Sinnott-Armstrong, 2019). Neuromarketing is, then, just another tool for marketers to reach this objective. The ethical issue it raises is that new opportunities to influence consumers without their full awareness may increase significantly as a result of research on brain activity (Wilson et al., 2008).

In the face of this issue, there are advocates (Singer, 2004; Huettel, Stanton and Sinnott-Armstrong, 2019) who defend that Neuromarketing strategies will benefit consumers by giving organizations a detailed insight about their needs and desires, as well as critics (Pirouz, 2004; Lovel, 2003, Prieto, 2011) who suggest that such strategies will limit individual freedom to make informed decisions.

2.3. Ethical controversies of Big Data strategies

Big data can be defined as high-volume, high-velocity, and high-variety information assets that demand cost-effective, innovative forms of information processing that enable enhanced insight, decision making, and process automation (Gartner IT Glossary). The increasing use of social media (social data), GPS-enabled devices, Internet of Things (machine data), or almost any other sort of purchase, online or offline (transactional data) are examples of sources for this enormous gathering and storage of data.

Organizations from all sectors find Big Data useful to boost customer acquisition, lower costs, predict consumer behavior by identifying trends, create more personalized marketing campaigns, or better handle supply chain and products by efficiently detecting errors. Then, there is really no question regarding the usefulness of this technology for organizations, but similar to the case of Neuromarketing, some issues naturally exist and they need to be discussed before this practice can be declared ethical beyond reasonable doubt.

Loss of control

Some of the most significant concerns from the consumers' point of view for Big Data are 1) the sense of an almost complete loss of control due to the amount of sources that

organizations can use to gather data, and 2) the subject's apparent incapacity to fully understand the extents and implications of this gathering of information. This issue is more complex and goes beyond what we understand as "consent*"*, since the continuous repurposing and use of already processed or inherent data sets have made the traditional consent models insufficient and obsolete in Big Data (D'Acquisto et al., 2015). Often, the organizations themselves do not know exactly what the data they are collecting is going to be useful for, until they find a use for it. So, it is often hard to offer the "data generator" a specific purpose they can agree to at the moment of this data collection.

It is, at present, really hard or almost impossible to limit the use of our data. A subject can give the right to publish their comment on a restaurant to a website, but are they aware that the website may be generating data accessible to possible employers, which from those comments might assess if this given subject is morally in line with their company policies? (Ceccaci et al., 2017)

The lack of knowledge or understanding about which data is being collected or what it can be used for puts the "data generator" at an ethical disadvantage regarding knowledge and free will. According to some authors, this causes Big Data's ethics to move away from a personal moral agency and increases the moral culpability of those that have control over Big Data (Zwitter, 2014).

In the face of this preoccupation, it becomes increasingly important to teach the general public about the importance of their digital footprint. Even so, whether a more extensive technical education can solve the inequality between data generator and data collector is still an ongoing debate.

Privacy, transparency and security

When it comes to a gathering of potentially personal data, privacy, transparency, and security are always issues of interest. This is no different in the case of Big Data. The current legal framework to assess privacy issues raised by Big Data analytics in the EU (Annex 1) establishes that personal data should be collected and processed fairly and lawfully (D'Acquisto et al., 2015). This regulation implies that personal data must not be gathered without the individual being aware of it, nor should it be stored after it has served the purpose for which it was collected.

Similarly, it is expected that there might be a preoccupation about the security under which this data is stored. In the case of an organization's data base being hacked or breached in any way, there will be a public scandal which will harm the organization's image. This is why the European Privacy Association states that companies of the 21st century should see data protection as an asset rather than an obligation.

Discrimination

The issue of discrimination caused by Big Data might be an unexpected one, but it is one of the most pressing issues risen by this phenomenon. The fact is that algorithms learned by machines have the potential to institutionalize unfair biases and indirectly discriminate against certain groups of people.

Once a society takes steps towards creating policies based on a data-driven approach and promotes a new policy built on data collected via sensors, social media, etc., then the risk is that this policy will only account for the needs of people that have access to these technological means (Ceccaci et al., 2017). This would be a way for the technology to worsen the social and demographic discriminations that already exist in the offline world and an evident ethical concern for Big Data.

Another way Big data can cause discrimination, as argued by Lupton in 2015, is through the disclosure of sensitive data, specifically sexual preference and health data related to fertility and sexual activity could result in stigma and discrimination (Favaretto et al., 2015).

2.4. A deontological approach

Based on the work of Immanuel Kant, deontology is a theory in normative ethics that defines an action as either ethical or unethical by assessing whether it obeys ethical rules or follows the established *duties.* As opposed to utilitarianism and consequentialism, deontology argues that the ultimate effects an action has on the world or on the individuals should not be taken into account while categorizing it as "right" or "wrong". The main principle of this Kantian approach is respect towards others, by treating each individual as an *end* rather than the *means* for an end, as well as respect for their 'free will' (Frederick, 1999).

Within professional corporations, the code of ethics often represents the formalization of a deontological approach. Though, of course, the sole fact that a company has a code of ethics does not guarantee its conduct will be deontological (Nantel & Weeks, 1996).

Regarding the ethical concerns discussed in the sections above for Neuromarketing and Big Data, a deontological approach for **Neuromarketing** would imply keeping in mind Kant's second formulation of the Categorical Imperative mentioned above*: "Act in such a way that you treat humanity, whether in your own person or in the person of any other, never merely as a means to an end, but always as an end in itself".*

One could argue that, if marketers discover and use knowledge about the mechanisms that make their customers' brains want to get something, they are treating these human beings not as an end in themselves but as a means to increase sales (Wegener, 2012). A deontological approach could then consider all neurological research done for marketing purposes, and therefore the whole idea behind *Neuromarketing* to be unethical.

However, it is essential to remember that this statement will be true for all marketing practices, involving neuroscience or not. It is then more convenient, when it comes to marketing, for deontology to evaluate marketing actions according to the extent to which they comply with the established duties.

Neuromarketing Science and Business Association (NMSBA) has established an ethics code (annex 1) to be applied to all cases of Neuromarketing research. A deontological approach to Neuromarketing would require all of the items in this Code of Ethics to be respected at all moments, even during dilemmas where a corporation is sure that a slight violation for any of the items will result in a more positive outcome for the customers.

For **Big Data**, a deontological approach would find it unacceptable for CEOs or leaders of an organization to engage in actions such as convincing individuals or legislators to accept lax standards of privacy of personal information (Charles, Tavana, Gherman, 2015).

There must be a full knowledge and understanding from the customer's side about the data collected, the methods, and the purpose. Any interaction with the data that goes beyond the established objectives will be considered inappropriate, even if it's done for the purpose of maximizing positive outcomes.

In situations where they might be a particular group being disadvantaged or discriminated by the technology Big Data provides, a deontologist code of ethics would choose not to implement such strategies, no matter how small the discriminated group and how big the advantaged one.

2.5. A utilitarian approach

The core insight behind utilitarianism is that morally appropriate behavior will not harm but instead increase happiness or 'utility'. Though there are many varieties of this view, utilitarianism is generally held to be the view that the morally right action is the action that produces the most good for the greatest number of people. (Mill, 1901).

Marketing is known to follow a utilitarian approach given its most basic purpose: to create and distribute goods and services that satisfy customers' needs and desires. The ultimate goal is maximizing the satisfaction of the maximum number of customers.

Therefore, for the ethical concerns discussed above for both Neuromarketing and Big Data, a utilitarian approach would require the Ethics Code of the organizations to evaluate the consequences the research or the application of the research would have on the customers, society, or environment.

An example for **Big Data** could be a non-profit organization gathering mass amounts of data and sharing it with other organizations to ultimately increase the number of donations received or conserving it after they have served their purpose. Similarly, it would justify any use given to the collected data for a for-profit organization if the company can assure better satisfaction, or *happiness,* for the customers. This could mean improving products or services through data interaction that the subject does not fully acknowledge or understand or maximizing efficiency and well-being for a large group of society at the cost of some minor group's interests. In other words, a utilitarian customer would value the company's intention of incrementing his or her satisfaction or the total satisfaction of the society, and would consider it acceptable to sacrifice certain factors in order to achieve this.

For **Neuromarketing**, utilitarianism also takes an approach that focuses on the ultimate outcome of maximizing customer satisfaction by designing and offering products and services that improve their lives, happiness, and overall well-being. Concepts such as privacy or consent are not foregone, but there will be justified cases where they are handled in a flexible manner or as means to a specific end.

For example, contrary to deontology, a utilitarian ethics code would allow actions such as using neuroscientific knowledge to generate subliminal advertising aimed at children younger than twelve years old (who, due to an undeveloped pre-frontal cortex, are more

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susceptible to such manipulation) in order to sell them products and donate benefits to organizations that help a social cause.

These actions will be seen from a utilitarian point of view as justified means to achieve an end, whereas from a deontological approach, they would be unacceptable.

2.6. Generation Z

This study investigates the perception of generation Z individuals for the previously explained topics. Although the range of years for this generation's individuals vary across sources, the study will set the year of birth for this generation from 1995 onwards.

This is a generation that is currently being the focus of attention for many pieces of research due to their native relationship with the digital era and its technologies. Researchers are finding it interesting to study how this presence and interaction with technology from the day they're born affects the social, economic and, in the case of this current study, ethical perceptions of these individuals.

It can easily be argued that it is exceedingly important for all companies to recognize the ethical perceptions of these individuals, given that the tight relationship they have with the digital platforms allows them to speak out their minds to a wide range of audience. Consequently, even if the company's direct target are not Generation Z users, any discontent of these individuals with the company can easily cause a reputation crisis.

2.7. Conclusions

After discussing Neuromarketing and Big Data's ethics, assessing the possible ethical concerns so far, and responding to them from a deontological and utilitarian approach, the question remains about the perceptions of the average Generation Z consumer in the face of these new technologies and the ethical dilemmas they entail.

As concluded by Schlegelmilch and Öberseder in their research about the emerging trends in marketing ethics (2009), the researches done in this field focus primarily on the description of managerial actions when facing ethical situations. However, they do not clarify how moral standards should be (Schlegelmilch, Öberseder, 2009). Hence, in the future, more room should be given to a discussion of normative marketing ethics that establishes guidelines for marketers rather than investigating their behavior (Laczniak and Murphy, 2006).

The most complex dilemmas arise when a deontological act that follows strict ethics codes causes a negative impact; or when a utilitarian act, which causes a positive overall impact, violates individuals' rights or liberties in the short term. The purpose of this study, from this point forward, will be to identify the response of the generation Z customer in the face of such ethical dilemmas and find the ethical approach they would consider most suitable. Later, the focus will be on discussing the insights and justifications behind each approach in order to provide a better understanding of the customers' ethical perceptions.

The investigation will draw conclusions regarding the generation Z customer's perception regarding the issues discussed in the sections above in order to offer companies a clear insight as to the ethical implications of Big Data and Neuromarketing.

3. Research question, objectives and hypotheses

The current study revolves around one main question: what are the 21st century's new marketing strategies' implications for generation Z consumers' and what are their ethical perceptions for these strategies?

3.1. General objective

The study aims to describe the implications of Neuromarketing and Big Data strategies on the ethical perception of the generation Z customers.

3.2. Specific objectives

The **first objective** is to identify the ethical approach corporations should have (deontological or utilitarian), according to customers, when they are faced with ethical dilemmas involving the new marketing strategies of Neuromarketing and Big Data.

The **second objective** is to analyze the motives behind both ethical approaches through an understanding of their reasonings. Examine the factors that cause the participant to have the chosen approach.

The **third objective** is to learn and discuss the most common perceived threats by customers in the face of Neuromarketing and Big Data strategies through a deeper analysis of the customers' reactions when confronted with hypothetical ethical dilemmas.

3.3. Hypothesis

For the general objective of the study, the research hypothesis is that the main factors of the new Neuromarketing and Big Data strategies that have implications for generation Z customers will be; the continuous presence of the data collection tools, the ability of companies to collect data without the subject's knowledge and the invasion to privacy cause by the data collection from subconscious processes of thought.

Regarding the specific objectives, in the first place, when presented with a deontological or a utilitarian approach, the hypothesis is that around 90% of the participants will show a utilitarian approach for the case of Big Data, while only 30% show a utilitarian approach for Neuromarketing strategies. It is expected for Generation Z customers to be more willing to sacrifice rights regarding privacy than rights regarding autonomy of thought or behavior. This hypothesis is grounded on the information analyzed in the section 2.6

about the native relationship of these customers with the digital world that has constantly been collecting data from them since the moment they were conscious of their own selves. Therefore, this study expects that they will be willing to grant them more data in exchange for better or cheaper products and services.

On the other hand, the implications Neuromarketing strategies are expected to feel more sensitive for them, both due to the fact that it is a newer and more unknown marketing technique, and the Generation Z's inclination to value full autonomy of decision.
In summary, the hypothesis for this part of the research is that the Generation Z customer will be utilitarian when it comes to Big Data strategies and deontological for Neuromarketing practices.

As to the second specific objective, the study's hypothesis suggests the main motive behind the choice for a deontological approach will be the individual's personal belief on the importance of free-will and privacy. On the contrary, the main motive behind the choice for a utilitarian approach will be the fact that they consider their ultimate satisfaction with the product more important than the sacrifices they have to make regarding personal data.

Finally, the hypothesis for the last research question states that the most common threats perceived by generation Z customers regarding these strategies will be the loss of individual control over data and the possibility for companies to over-exploit the knowledge obtained with Neuromarketing to dangerous levels.

4. Methodology

4.1. Methodology overview: population, sample and method

As explained in the theoretical framework, the present research is designed to investigate the ethical perception of individuals of Generation Z residents in Catalonia. For practical reasons and given the nature of conscious reflection the investigation techniques will require, all participants will be at least 18 years-old, setting the age range between 18 and 25 years. In Catalonia this age range accounts for 639.986 individuals.

Qualitative methods are chosen for the field research that will answer the questions raised by this study, given the need to interact with the participants on a focused and individual basis, and also caused by the fact that the study aims to explore mostly into open-ended questions. It will be enriching for the research to give the participants the freedom to answer in their own words during an interview, rather than choosing between previously established options. Ethics is a subject that is difficult to explore in a quantitative way because it attempts to examine aspects of human behavior and points of view that can be understood most accurately through the personal expression of the individual. The philosophical essence of the questions that this study explores requires a qualitative research that will allow room for unscripted, personal and diverse answers.

The first method employed is the interviews, and the sample is to be decided during the research through the data saturation technique. This technique implies that as interviews are conducted, the researcher will assess them individually on a theoretical level to note the subjects and terms discussed in each one. Theoretical saturation will be reached when new interviews don't discuss new subjects anymore, and terms start to be repeated as all possible answers are covered. It is estimated to reach saturation on the fifteenth interview onwards.

The second method to be applied is a focus group that brings together six individuals that have previously been interviewed. The objective is to present three individuals that have found a deontological ethics code more appropriate with three individuals that have found a utilitarian ethics code to be so. A debate will be encouraged between the six participants with the goal of uncovering answers for the second and third specific objectives of the study, meaning that the session will discuss the motives behind both ethical approaches and the most common perceived threats in the face of Neuromarketing and Big Data strategies.

As mentioned, the purpose is to bring together people with different approaches. The following table explains the way the participant selection will be done for the focus group in order to meet this purpose.

Participants for Focus Group	Approach taken in the interview	For Case (A/B)
1. Participant	Utilitarian	A
2. Participant	Utilitarian	B
3. Participant	Deontological	A + B
4. Participant	Utilitarian	A
5. Participant	Utilitarian	B
6. Participant	Utilitarian	A + B

Table 1. Sample selection for the focus group

At this point some limitations should be noted. The ideal sampling procedure for the interviews would be a random sampling technique in order to choose participants from the population in an unbiased way. Nonetheless, given the present research's incapacity to perform a completely random sampling, there will be certain bias regarding the selection of the participants for the interviews.

Though both techniques are going to be carried out in person, during the transcriptions that are going to be included in the study, the participants' anonymity will be kept for both the interviews and the focus group. They will be distinguished by their initials and participant number.

4.2. Data collection techniques and instruments

As stated above, the selected research method (qualitative research) involves two techniques: interviews and a focus group. Hereunder, the instruments for these two techniques are explained along with the manner in which they are employed to obtain the expected information.

4.2.1. The interview technique and instruments

During the first technique, the interview, the objective is to identify the ethical approach the participant believes organizations should have in case of an ethical dilemma. The participants will be presented two hypothetical cases of a company confronted by a normative ethics dilemma that needs to take action in one way or another. One case will involve the use of a strategy surrounding Big Data and another case will involve a Neuromarketing strategy.

The participants' reaction and perception on which of the two actions is the most ethical will be recorded. This election will initially categorize participants as either deontological or utilitarian.

Thus, the instruments employed in this technique (Annex 2) will be the hypothetical cases that are going to be presented to the participant and an open script used as a question guide during the interview. In order to enable the posterior analysis of the data obtained from the interview, the script will be designed to gather data from the participant about categories that will be defined previously. These categories or variables are then used with the purpose of organizing the received data in the way that will best help extracting the necessary information to respond to the three research questions. Keywords will be used to help transform raw data from the transcripts into organized information under each category.

Hypothetical cases to be presented during the interview

Further explanation as to how each option in both cases represents a deontological or utilitarian approach can be found on Annex 4.

Case A

The first case represents a dilemma faced by a start-up company; a price comparison app for articles of primary necessity such as food, basic clothes, hygiene and sanitary products, etc. The company has two possible ways of organizing its business plan; one where the data collected from clients is absolutely confidential, but the app is paid, and one where the company sells data collected from clients and manages to make the app free-to-use for all.

Selling data is a legal activity, but when a company sells clients' data to third parties, it becomes increasingly difficult for the average customer to keep track of which companies end up having their data, what they are using it for, or whether it is being put to good use by all of parties. This would therefore pose a greater security and privacy risk for all customers. However, managing to make the application free would mean more people could afford to use it, especially considering that it is a price comparison app for basic necessities that can families and people in need.

This situation represents a normative ethics dilemma where the first choice (guaranteeing clients total confidentiality and making the app paid) would mean a

deontological point of view and the second choice (selling clients' data and making the app free) would represent a utilitarian approach.

Case B

The second case aims to work out the participant's approach in the same subject regarding Neuromarketing. It is the case of a non-profit organization who discovers which images are most effective in creating a *willingness-to-pay* effect on subjects through Neuromarketing research. The dilemma faced by the organization is whether to use these images for campaigns that need urgent donations, even if the chosen images are not fully representative for the causes of these campaigns.

The participant may believe, in one hand, that the ethicalness of the action resides in achieving the donations for those in need, or, in the other, that it resides in respecting the full autonomy of decision of the client, even if it means they won't be inclined to help.

Once again, the situation represents a normative ethics dilemma where, the first choice (not using the effective images for urgent campaigns) would mean a deontological approach and the second choice (using the effective images for urgent campaigns) would correspond with a utilitarian approach.

4.2.2. The focus group technique and instruments

The focus group will bring together six individuals that have previously been interviewed. Half of these six individuals will have shown a deontological approach, while the other half will have shown a utilitarian approach. The objective of the session will be to, first, discuss the motives behind each individual's choice, and then dig deeper into the insights and preoccupations behind their thought processes.

The instrument will then be the open script (annex 3) with the purpose of introducing the objectives of the session and starting the debate. The main topics of discussion the session will be:

1. Reasoning the election made in the survey for both deontological and utilitarian thinkers. Listing the arguments for both sides.
2. The extent to which the participants feel vulnerable as customers in the face of the marketing technologies of the 21st century. Do deontological thinkers feel vulnerable in different aspects than utilitarian thinkers?

3. Aspects in which participants perceive these strategies to be threats to individuals.

This technique with the use of this instrument will gather insights and motives and allow a space to debate with participants who have the opposite perspective.

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4.3. Methods of data analysis

A qualitative analysis by categorical thematic will be carried out with the data collected from both research techniques. The raw data for both techniques will be the transcriptions, found on Annex 5 and Annex 6. After an initial cleansing of these transcriptions, they are going to be coded under different categories according to the research questions both techniques aim to answer. These categories are then going to be analyzed and interpreted in a qualitative manner to draw conclusions.

4.3.1. Data analysis for the interview

The initial analysis of the interview will respond to the first research question through the calculation of the percentage of participants that have taken a deontological and the percentage of participants that have taken a utilitarian approach for each strategy.

After this initial analysis, the four thematical categories that will ease the analysis of the interview are: 1) *Deontology for Big Data,* 2) *Utilitarianism for Big Data,* 3) *Deontology for Neuromarketing* and 4) *Utilitarianism for Neuromarketing.* After the participants' first response to the question about both hypothetical cases, they will either be defined as "deontological" or "utilitarian" under these categories for both strategies. Later, the qualitative analysis will consist on analyzing each transcription separately to extract the most important quotes that can be studied as motives for each approach, organized under the corresponding category. These citations will serve to obtain information about the informants' thought processes and explain the insights behind each case. The process of analysis described so far will extract the information necessary to answer the first two specific research questions.

An overall examination of the analyzed data will be made in order to point out agreements and disagreements between informants. The differences in the answers for the two hypothetical cases (regarding Big Data and regarding Neuromarketing) will be studied in conclusions.

4.3.2. Data analysis for the focus group

In the case of the focus group, the data will be manually cleansed while transcribing in order to clean out sentences that don't hold a meaning for the purpose of the study. The categories of analysis for the focus group are to be defined as 1) *arguments for deontological approach,* 2) *arguments for utilitarian approach,* 3) *counterarguments for deontology,* 4) *counterarguments for utilitarianism* and 5) *perceived threats.*

The first two thematic categories used in the interviews will be discussed once again in order to observe the way they are discussed and explained to the other participants in the group. The analysis will determine if participants react in different ways or use different terms when answering as part of a group.

The counterargument categories for each approach will serve for identifying the ideological differences between informants that defend opposite approaches. The purpose is to gain a better understanding of the individual's insight by discovering what they agree and disagree with on moral standards. This also serves to identify strengths and weaknesses in each moral theory that can be followed by organizations or customers.

Under the category *perceived threats,* the keywords to be defined are the participants' answers when asked about their primary concerns regarding these strategies and will help answer the third specific question of the research (learn and discuss the most common perceived threats by customers in the face of Neuromarketing and Big Data strategies). The analysis of this category's results will point out factors organizations must keep in mind while implementing these strategies in order to assure a good customer acceptance.

5. Results

The data obtained with the field research is organized in the following section through the coding of information under categories as explained above in Methodology: data analysis. The initial categorization and raw analysis of the data can be found on Annex 7 for the interview and Annex 8 for the focus group.

5.1. Analysis of data obtained from the interviews

The first part of this analysis is regarding the first specific objective of by the research; to identify the ethical approach corporations should have, according to Generation Z customers, when they are faced with ethical dilemmas involving the new marketing strategies of Neuromarketing and Big Data.

The results obtained according to the response of the informants to Case A about Big Data indicate that only three informants out of thirteen have chosen a deontological approach. This accounts for a 23,08% of the sample, meaning that the majority (76,92%) of them have shown a utilitarian approach.

In comparison, for Case B regarding Neuromarketing, the number of informants that have chosen the deontological approach is nine out of thirteen informants, meaning a majority (69,23%) of the sample and leaving a 30,77% for the utilitarian approach. The following table sums up this information.

Big Data: Case A		
Deontological informants	3 out of 13	23,08%
Utilitarian informants	10 out of 13	76,92%
Neuromarketing: Case B		
Deontological informants	9 out of 13	69,23%
Utilitarian informants	4 out of 13	30,77%

Table 2. Interview results regarding the first research question

After this initial diagnosis, each established variable (defined in methodology) is analyzed according to the quotes extracted from individual participants. The objective of this analysis is to respond to the second research question; by analyzing the motives behind both ethical approach.

Variable 1: Deontological approach for Big Data

During the qualitative assessment of the responses given by the deontological thinkers for this case, a general lack of trust stands out.

*"These practices are never **transparent**. When a client gives a company access to gather and share data, the client **loses control** over it and the company makes profit out of this."* (Participant 3; O.N.M.)

This informant's quote signals an important factor behind this lack of trust. There is a concern regarding the transparency of the practices involving the selling and buying of data between organizations. The informant suspects this lack of transparency is what allows companies to take advantage of the client's ignorance and make profit by easily convincing them to give away more data that can be sold. From this point of view, the free product is seen as a way to lure clients into sacrificing privacy.

The loss of control is mentioned by another informant when talking about the impossibility for the average client to follow up on where their data ends up.
*"It will become **impossible** for the client **to keep track** of which companies have their data and which companies don't, or what they are doing with it."* (Participant 1; I.S.G.)

The fact that it becomes increasingly hard for the client to understand how many or which organizations will have their data after this exchange between companies seems to worry these informants. Not having the necessary information about the companies that have their data at their disposal implies not knowing the use given to this data by these companies. This seems to cause a visible discomfort from the point of view of the three participants that have voted the deontological approach for Big Data.

Another factor to be mentioned for this case is pointed out by participant 2:
*"The first model would give the company a better image and **brand reputation** if the clients are guaranteed that their data is going to be safe."* (Participant 2; I.G.V.)

As the only informant that mentions the consequences this strategy might have on the organization that employs it, the participant shows concerns for the reputation crisis that might be caused if there is a data breach caused by the fact that the company has been selling data to third parties. This concern is also related to the suspicion that third parties might misuse the data that they have acquired from the company.

Finally, out of the three informants that have chosen the deontological approach, only one of them considers the selling of data between companies not to be an offense against the privacy and the liberty of the customer.

"I don't think it's an offense to the client because they are being informed that the data is going to be sold." (Participant 2; I.G.V.)

While the rest of the deontological thinkers (informants 1 and 3) consider business done by selling clients' data to be an offense against their freedoms, participant 2 argues that this is not the case since the client agrees to the selling of data in exchange for the free product. However, she is still against this kind of practices and believes them to be unethical.

Variable 2: Utilitarian approach for Big Data

This category chosen by the majority of the informants is grounded on a perspective based on results. Informants with this point of view often imagine the situation on a scale and see a balance between their sacrifice and reward.

*"If I look at the **balance** between the benefits that I obtain in each case, I think I will be **happier** if I don't have to pay to achieve what I want from the application."* (Participant 6; G.Z.G.)

*"The companies that want our data want it i**n order to be able to offer us the things that we want and need**."* (Participant 11; M.T.)

*"We use **free applications** every day and I understand that the companies need **something in return**."* (Participant 13; V.G.P.)

As stated by these informants, the focus is on the immediate outcome of each option. The outcome of having a free product weighs more for the viewpoint of these informants than the potential risks of data exchange between companies. It should be noted that these participants also see the sale of data as a privacy *sacrifice* made by the clients, but they see this as a sacrifice worth making if they are to obtain a free and quality product in exchange.

*"I would be **willing to sacrifice privacy** for this kind of personal data if in exchange I am going to get a **free product**."* (Participant 10; J.C.H.)

*"I would feel comfortable with sharing my data with the companies if they are using this data to **improve their services**."* (Participant 7; N.H.)

A topic that comes up during multiple interviews with participants with this approach is the digital era that we are living in as consumers of the 21st century. Five different participants mention this in their discourse when placing the case in context. Their

argument is based on the fact that as a generation dominated by the use of technologies that surround us, these kinds of data exchange form a natural part of our everyday lives.

*"In the **digital world** that we live in, **our data is almost everywhere**, I don't think it's considered an offense to sell data anymore."* (Participant 5; C.S.G.)

*"In **this digital society**, I feel like we do **give up a lot of our privacy anyway**." (Participant 10; J.C.H.)*

*"This is **inevitable in the digital world** if we want to keep getting free and good services."* (Participant 7; N.H.)

*"This is a **digital world** that we live in and doing business with customers' data is a regular practice now."* (Participant 9; M.C.A.)

This observation gives the impression of a normalization of these strategies that involve moving around clients' data, even if it's of a personal nature. They trust in the quality of the products and services that are offered to them and perceive this to be a positive thing that should be valued by customers. Consequently, these participants in general don't show concern over the loss of control implied with the movement of data they don't completely understand or follow.

*"What I value the most is the fact that the app is **free**. Regarding the data, honestly, I **don't really pay attention to the terms** I agree to before I use an app."* (Participant 4; M.R.C.)

Furthermore, they point out that as part of a generation that is constantly connected and integrates these technologies in their lives, they often place sensible personal information on the internet voluntarily.

"When I go somewhere, I **post pictures** on Instagram and **share my location**." (Participant 10; J.C.H.)

*"When I think about all the apps that collect data from me, and the fact that I **voluntarily share** a lot of personal data on social media, etc., I believe it wouldn't be such a big deal for one more app to have my data."* (Participant 9; M.C.A.)

On another note, as explained in Annex 4 for the explanation of the utilitarian theory applied in case A, the utilitarian thinker can base their argument on either their own satisfaction with the product or on the benefit of the majority. Four out of these ten informants that have chosen the utilitarian approach have stated that their primary motive was the fact that more people are going to have access to the product if comes without a cost of subscription.

*"It would be more ethical for the company to make the app free and **allow more people in need to be able to use it**, since it's a price-comparison app that will be useful for **low-income families**."* (Participant 5; C.S.G.)

*"Especially considering that this is an app that is going to **help people**, I think it should be free and everybody should be able to have **access** to it."* (Participant 7; N.H.)

*"If it's a paid app, I think a lot less people are going to have **access** to it, and that just **sounds more "wrong" than selling people's data**."* (Participant 12; N.C.)

For these participants the main concern is on allowing the maximum number of people access to a product that has the potential of improving their lives. They judge the ethicalness of the action by the objective outcome that it brings in its whole, while the other six participants assess the individual satisfaction they are going to achieve from the product that is offered.

Finally, when discussing whether it should be considered an offense to make business out of selling clients' personal data, the majority of the utilitarian participants (eight out of ten) completely deny seeing it as an offense. As to the evaluation of the remaining two participants' responses, one of them admits seeing it as an offense, but stresses the importance she gives to the product she obtains in exchange;

"I do think that it is an offense against my freedom, especially if every organization starts asking me to give up all my data to use their services, but still I value the satisfaction that I will get from being able to use the app freely. I would say that I'm willing to make that sacrifice in this case because it's worth it if I want to use the app." (Participant 4; M.R.C.)

On the other hand, participant 8 states that she would consider it an offense under normal circumstances, but given this specific case, she sees it as an ethical act that is justified with the outcome.

"Normally I would consider it an offense, but in this case, I think it is justified because the company is doing this in order to be able to give more people access to their product and therefore should not be seen as an offense." (Participant 8; E.M.R.)

Another response worth mentioning for this question is the one given by participant 12 where the exchange of data is seen as a new "price" to be paid by clients in order to have access to free products that meet their needs.

"There are a lot of organizations collecting data from us and using it to offer us good products that we need. So, I don't think it should be seen as an offense, but rather as a "price" to be paid." (Participant 12; N.C.)

Variable 3: Deontological approach for Neuromarketing

As analyzed during the initial examination of the results, case B about Neuromarketing has significantly more votes for the deontological approach than case A about Big Data. Nine out of thirteen informants fall under this category. It can be observed from an initial reading of the raw data (interview transcripts) that there is visibly more concern over this topic than the topic of Big Data.

The most commonly mentioned concepts are *manipulation* (five participants), *respect* (four participants) and *sincerity* (three participants).

*"They shouldn't have the right to **manipulate people to convince them**, even if it's to achieve something "right"."* (Participant 11; M.T.)

*"The fact that they are a non-profit that is helping a cause **does not justify** the use of an unrepresentative picture. I would consider that they are not **respecting** me."* (Participant 4; M.R.C.)

*"The organizations must be completely **sincere** in both the explanation and the picture used in the campaign."* (Participant 3; O.N.M.)

A qualitative observation can be done about the apparent indignation these informants show when they imagine themselves deciding to donate money because of the emotions evoked by the images shown to them, only to find out they weren't fully representative of the cause.

Another source of disapproval is observed to be the sense of being taken advantage of as donors. Participants make reference to their subconscious and their emotions when talking about this concern about how the organization is taking advantage of them. This can also be related to a fear of losing control, since both these elements are difficult to be controlled consciously by the person.

"There is a little manipulation when it comes to taking advantage of what unconsciously attracts people to certain things." (Participant 9; M.C.A.)

"Organizations should not have the right to take advantage of what evokes my emotions the most and use it to convince me." (Participant 13; V.G.P.)

Similar to what's been observed in the deontological approach for case A, the deontological thinkers for Neuromarketing also admit seeing the possible positive outcome of the strategy. They even agree that not taking advantage of this powerful technique and avoiding this positive outcome might make them feel sorry about the situation, though they still think it's not an ethical action because of the means employed.

"If I stop to think about the urgent causes that need help, I do feel bad that maybe they won't get the necessary attention, but still I don't think that it is acceptable for the organization to mislead customers." (Participant 8; E.M.R.)

"Maybe the overall consequence would be positive, but I still don't feel like this is an ethical thing to do." (Participant 12; N.C.)

On a final note about this approach, participant 11 incorporates the categorical imperative directly in her discussion when she contemplates a scenario where all organizations employed Neuromarketing strategies in this way.

"If all organizations did this, we would be tricked and manipulated all the time. So, the fact that they are a non-profit should not change this. They owe people the same respect." (Participant 11; M.T.)

All nine participants that have taken this approach agree that the end of helping people in need does not justify the means employed in this case.

Variable 4: Utilitarian approach for Neuromarketing

A minority of participants have taken the utilitarian approach for case B (4 participants), and in a similar way to case A, the main focus of their argument is on the positive outcome that is to be achieved through this strategy. Although they agree on how this might result to be an insincere technique, the general consensus among these informants is that the ultimate goal of the organization, which is to help people in need, justifies the means involved.

"Using a misleading picture that is proven to be efficient might be taking advantage of the customers' emotions, but I don't really see it as a violation of their rights. The organization is helping a cause, and sometimes these techniques can be necessary to achieve what's needed." (Participant 1; I.S.G.)

*"**Any technique** that can be used to collect the greatest amount of donations is valid and good, as long as the **purpose** is to help."* (Participant 6; G.Z.G.)

A view of a balance can be observed in this case also, where the ultimate outcome weighs more than the possible sacrifice of full autonomy over the decisions of the donors. All of these informants agree that this is not the ideal way of obtaining donations, but given the urgency of the cause and the possibility of resolving an important problem, they see it ethical for the organization to use all the techniques they have at their disposal.

"In general, non-profits should not use misrepresentative pictures in their campaigns, but, in this case, if it's a really urgent cause that needs donations and lives can be saved, I don't think it would be unethical." (Participant 5C.S.G.)

5.2. Analysis of data obtained from the focus group

The main reason for the realization of the focus group was to respond to the third and final specific objective of the research; to learn the most common perceived threats by customers in the face of Neuromarketing and Big Data strategies. Before arriving at this point, the selected participants (explained in table 1 in Methodology) were asked to share their point of view for the cases with the group. This aims to both remind the informants about the cases to be discussed and observe whether there's a change of opinion or manner of expression when it comes to communicating their viewpoint to third persons.

Variable 1: Arguments for deontological approach

It can be observed at the beginning of the focus group that the main topics analyzed in the interviews arise once again. For case A deontologists, it appears to be important to remind the loss of control by clients and the security issues this case might imply:

*"Once a company starts selling our data, **there is no viable way of controlling where it ends up**. This sounds like an important **security issue** that can easily have damaging effects on the clients."* (Participant 1; I.S.G.)

*"If we start to sacrifice our rights as customers, it will be really difficult to draw **lines that shouldn't be trespassed**."* (Participant 3; O.N.M)

While among the case B deontologists the perception that the client is being taken advantage of and the concept of *respect* are repeated:

*"I don't find it ethical for organizations to **take advantage of the biases of my brain**, no matter what their objectives are."* (Participant 2; I.G.V.)

*"Everyone must be treated as equals that deserve the same **respect**, whether they are the person in need or the person helping those in need."* (Participant 3; O.N.M.)

Variable 2: Arguments for utilitarian approach

Utilitarian thinkers defend their viewpoint for case A primarily through the explanation of the balance they've mentioned in their interviews, and the necessity of this exchange in the digital world. For case B, their focus appears to be on the importance of the outcome achieved by the strategy used by the non-profit organization. The point they ultimately arrive at with this argument is the fact that ends justify the means for both cases.

*"In this **digital world**, this (selling of data) is the **new "price"** that we pay for free and quality products that they (organizations) manage to create by knowing our needs and desires."* (Participant 4: M.R.C.)

*"Even though we might not be comfortable with the way they (the objectives) are achieved, we have to focus on the "bigger picture". Important **outcomes like saving lives or helping people in need should be placed above what moral implications** they might have for certain people. They (the donors) are still actively deciding to donate their money to a cause, they shouldn't find it unethical that these techniques are being used to better manage all campaigns."* (Participant 6; G.Z.G.)

Variable 3: Counterarguments by deontologists

In order to obtain a better understanding of their motives for taking one approach or another, the informants were asked to point out the opposite side's arguments they disagree with and why.

For deontologists, the main disagreement was about the normalization of such sacrifices made by clients. The categorical imperative came up again during this part of the focus group:

*"This might be the efficient way of achieving outcomes in some cases, but I don't think it is the ethical way. **If all organizations acted this way, it would definitely place some people in a very disadvantaged place where their basic rights would not be respected**, even if we're talking about a minority."* (Participant 1; I.S.G.)

This informant appears to be imagining the situation on a larger scale and noticing its unviability and the consequent dangers it might imply for the clients. The emphasis is on how the means used to achieve objectives must be designed with all of the clients and their rights in mind. It is also mentioned that clients should not be kept responsible for not wanting to sacrifice rights, even if by doing so they help companies to be more efficient and achieve better outcomes.

"Customers should not be blamed for not wanting to sacrifice certain things to obtain a greater consequence." (Participant 3; O.N.M.)

These participants agree on the necessity for these organizations to find alternative ways of arriving at the desired outcome.

"It should be the organization's responsibility to achieve the expected ends without asking the customers to become their means." (Participant 3; O.N.M.)

Variable 4: Counterarguments by utilitarians

Utilitarians, on the other hand, draw attention to the fact that if the organizations decide not to use the strategies they have at their disposal in order not to offend certain clients, as deontologists argue they should, they will be wasting opportunities to either offer good products or to help people in need. This appears to be perceived as more unethical from the viewpoint of the participants than using these strategies and possibly offending some clients.

"I don't think it would be more ethical for organizations to not use efficient strategies they know are going to work only because they are afraid of offending some clients. If we want positive outcomes, we have to use the tools that we have at our disposal." (Participant 6; G.Z.G.)

"It doesn't even really matter how they feel about it, the reality is that they will be helping, and it won't suppose a great inconvenience for them. It would be more unethical for the organization to not use the techniques that they know will work to get more people to donate." (Participant 5; C.S.G.)

Another weakness spotted by these informants in the deontological thinkers' arguments is the fact that it is not easy to establish universal rules that can be applied to all situations and strategies. This is related to the deontological thinkers' concern about the lack of guaranteed regulations that can be presented to the clients.

"We have to accept the fact that it's just too difficult to set rules and follow them blindly. Sometimes it's much more efficient to assess the situation and move in the direction that guarantees the best possible result for everyone." (Participant 6; G.Z.G.)

Variable 5: Perceived threats regarding Big Data and Neuromarketing

For the examination of this category, participants are asked about what makes them feel uncomfortable or vulnerable in the face of these strategies as customers. While answers vary across participants, all six of them had worries they wanted to share regarding the strategies.

A worry over the loss of control as clients, a concept that had come up in several interviews, is mentioned by two participants. Another participant relates this topic to a lack of *consent* from the part of the client, especially in reference to the Neuromarketing strategies that aim to analyze subconscious levels of thought and behavior.

"I also feel most vulnerable when I feel like I'm going to lose control. Whether it's over my data or the decision I make on a subconscious level, it doesn't really sound right for

an organization to be more in charge over these things that the clients themselves." (Participant 5; C.S.G.)

"With strategies that assess our subconscious, I think it's really difficult to obtain the client's complete consent, because I don't really understand how a person can give an organization their consent for analyzing things that the person himself can't really control and has little information about." (Participant 4; M.R.C.)

A concept that hadn't come up during the interviews is the lack of regulation that is perceived by these informants regarding these new strategies. This appears to provoke an insecurity for clients and lead them to believe companies can establish the rules that best suit them to produce more benefits.

"Since most of these strategies are new and unprecedented, I feel like there is no real regulation that dictates what can and cannot be done. I think there should be better public information about limitations and especially about customers' rights." (Participant 1; I.S.G.)

One of the participants who speaks out about her concern over the importance of regulations, draws attention to the future potential of these strategies. The possibility for the organizations to work on these strategies to perfect the in the ways that will best suit their interests appears to cause uneasiness among the informants.

"When these strategies begin to have more potential, who can guarantee us that the organizations will keep the best interest of their clients in mind rather than their own benefits? I think there needs to be some rules or regulations to guarantee we won't be taken advantage of as customers." (Participant 6; G.Z.G.)

5.3. Results overview

The following table summarizes the results obtained for each of the three research questions and the technique through which they were obtained.

1st research question: ethical approach of clients for Big Data and Neuromarketing	
Big Data Deontology: 23,07% Utilitarianism: 76,92% **Neuromarketing** Deontology: 69,23% Utilitarianism: 30,76%	Interview

2nd research question: motives behind the selected approach	
Deontology: • Fear of control loss • Fear of manipulation • Unwillingness to sacrifice rights • Lack of trust in organizations • The categorical imperative **Utilitarianism:** • Emphasis on satisfaction • Understanding of an exchange • Normalization of privacy sacrifice in the digital era	Interview + Focus Group
3rd research question: concern factors for the strategies	
• Lack of regulations • Loss of control • Dangerous future potential • Loss of liberty	Focus Group

Table 3. Results overview for each research question

Marketing and Digital Communities

6. Conclusions

Results obtained through the field work have been organized and analyzed above in response to each research question. The following section will revisit the hypotheses posed in the beginning of the research to either confirm or deny them and draw conclusions about the implications of the extracted results.

1st research question: most common approach selected by customers		
Big Data	**Hypothesis**	**Deontology:** 10% **Utilitarianism:** 90%
	Results	**Deontology:** 23,07% **Utilitarian:** 76,92%
Neuromarketing	**Hypothesis**	**Deontology:** 60% **Utilitarianism:** 40%
	Results	**Deontology:** 69,23% **Utilitarianism:** 30,76%

Table 4. Comparison results-hypotheses for the first research question

Though still part of the qualitative investigation, the results for the first research question can be viewed in a quantitative manner. As observed in the table above, the hypotheses for the percentage of deontological and utilitarian thinkers for these strategies are not numerically correct. The results show more customers with a deontological approach than expected for both strategies (13,07% more for Big Data and 9,23% more for Neuromarketing). Even so, the main idea behind the hypothesis, the expectation that there would be more deontological thinkers when it came to Neuromarketing than Big Data, turns out to be correct. Generation Z customers take a significantly more utilitarian approach in the face of Big Data strategies than Neuromarketing strategies.

The prediction for the explanation of this phenomenon, the fact that individuals of this generation have grown up surrounded by technologies that collect data from them constantly, also appears to be correct, since the concept of the "digital era" has been brought up multiple times by informants when justifying their answer. Three of them have made explicit mention to the fact they voluntarily share personal data on social media, which is why one more application gathering data from them would not suppose a great inconvenience. Further implications of these results can be better understood with the help of the results extracted for the 2nd research question.

2nd research question: motives behind each approach		
Deontology	**Hypothesis**	Importance of free-will and privacy and the unwillingness to sacrifice them.
	Results	Fear for loss of control, perception of disrespect and manipulation, and being taken advantage of by companies.
Utilitarianism	**Hypothesis**	Importance of personal satisfaction achieved through the product or service.
	Results	Importance of personal satisfaction and the understanding of an exchange.

Table 5. Comparison results-hypotheses for the second research question

While the hypothesis for the main reason behind the election of a deontological approach, the importance of free-will and privacy, was mentioned by participants in the interviews, the main arguments that were brought up by multiple informants were the loss of control, a perception of disrespect and manipulation, and the feeling of being taken advantage of as customers. These concepts were mentioned more than the importance of privacy/free-will and the unwillingness of customers to sacrifice it, denying the hypothesis about the main motive behind the election of deontology.

With this information it can be argued that in order for companies to implement these strategies without causing concern, they need to come with clear information about the objectives they aim to and the extends they will reach, in order to establish a sense of control in their customers. The weakness of these new strategies consists on this perception clients might have about them. The results show this might be interpreted as a feeling of disrespect for the clients, especially in the case of Neuromarketing where clients can feel they are being used as a means for the organization's objectives.

The indirect way in which the deontological participants based some of their arguments on the categorical imperative must also be noted. This result should encourage organizations to imagine the long-term situations their strategies might lead to if they were applied to a larger level by a larger number of organizations.

On the other side, regarding the viewpoint of utilitarian individuals, the hypothesis which predicts the main motive behind this approach, the importance of the satisfaction the client will achieve, is correct. These individuals make this election with their ultimate satisfaction in mind. They are willing to make an exchange (their data or full autonomy

of decision versus a positive outcome) if the satisfaction they will achieve from the exchange is satisfactory or helpful enough. This can be interpreted by companies as a liberty to adjust their means in order to guarantee the highest satisfaction their products will bring to their clients. It must be noted that this approach is more common for the strategy of Big Data, meaning that this liberty, at least for the moment, is reduced in Neuromarketing strategies. In a practical sense, it can be stated that Generation Z individuals see the *privacy-satisfaction* exchange to be more acceptable than *autonomy-satisfaction* exchange. This means, for organizations, that when implementing a Big Data strategy aimed at Generation Z, they can contemplate the outcomes of their actions more than the moral implications of every detail, whereas while implementing Neuromarketing strategies, there still needs to be emphasis on the ethical implications of every action involved.

3rd research question: most common perceived threats for both strategies		
Big Data	**Hypothesis**	Loss of control over data.
	Results	Loss of control and lack of regulations.
Neuromarketing	**Hypothesis**	Over-exploitation of resources/knowledge provided by Neuromarketing.
	Results	Future potential of the strategy, lack of regulations and the feeling of being taken advantage of.

Table 6. Comparison results-hypotheses for the third research question

The results for the last research question demonstrate the most common concern factors perceived by the customers confirm the hypothesis posed previous to the field work for both Big Data and Neuromarketing. There appears to be a common perception of control loss regarding data when it comes to Big Data strategies. This, similar to the results extracted for the previous research question, implies the necessity for organizations to better inform clients about the manner in which their data will be treated.

For Neuromarketing, the hypothesis about the most common concern factor is also correct since it is mentioned by participants when talking about the future potential of the strategy. It can also be viewed as a concern over control loss when companies develop this strategy to levels that allow them to establish a position of power over the customers. The clients' concern relies on an insecurity about whether the organizations will continue to keep their clients' best interests in mind or apply these strategies to maximize their

own profits at the cost of the customers. Furthermore, the feeling of being taken advantage of as customers was mentioned by several participants. This was mentioned regarding both the subconscious and emotions, and informants shared how it makes them uneasy to think that an organization is analyzing these human aspects to manipulate their behavior. As a strategy that is tightly related to the emotions and the subconscious, organizations must make sure they know how their customers feel about sharing these parts of themselves before they realize and apply Neuromarketing research.

A factor that wasn't contemplated in the hypotheses but was brought up for both strategies is a lack of regulation perceived by clients. Informants explain their concern over the lack of information provided to them about these strategies; about the way they work and the extends of their power. This is also related to the concern over control loss and causes clients to feel vulnerable. They clearly perceive these strategies to have a large potential and hold organizations accountable for their ethical implications.

A suggestion for organizations, grounded on these observations, would be a solid communication of both the objectives they aim to with the use of said strategies and the means employed to achieve them. Though the reached goal and the obtained satisfaction can be important factors for marketing with a utilitarian viewpoint, the theory of deontology suggests all organizations to be alert about the implications, both moral and technical, of all the actions involved in the strategy. Especially Neuromarketing strategies, towards which customers are mostly deontological, need to contemplate these aspects in order to be perceived as ethical.

6.1. Discussion: suggestions and limitations

The present study has investigated and drawn conclusions regarding the normative ethics approach taken by Generation Z customers for the strategies of Big Data and Neuromarketing. These results and their implications are useful for all organizations that may use these strategies. Nevertheless, in order to make minimum-risk decisions, the individual ethical implications of the two strategies should be analyzed further in a more exhaustive investigation. This paper is an investigation of a small extent that analyzes the two ethics theories individually for the two strategies but draws conclusions to a general level about the implications of the results. In a more thorough investigation, the insights behind each ethical approach can be discussed in detail for every strategy and action.

Furthermore, this study can be seen as a starting point for possible developments and research alternatives. For a start, a segmentation can be conducted by industry and by type of organization in order to observe if the customers' ethical approaches vary. An interesting area of study can be the causes of these variations in ethical perception and whether it is normal to expect different ethical judgments for different industries.

Though most of the utilitarian participants interviewed in this study chose this approach due to their desire for the highest satisfaction, four of them mentioned the purpose of the product (the application) in Case A. This leads to believe that the services provided, the purpose fulfilled by the organization and its social consequences affect the customers' ethical judgement. It would then be difficult to establish an ethics code that can be followed for all actions by all organizations across different industries without causing conflict. Similarly, the differences in the ethical judgment over actions taken by for-profit and non-profit organizations can be studied in further detail. A more specific study can be done by presenting the same ethical dilemma for a for-profit and for a non-profit to observe the differences in judgment.

A limitation of the present study, in relation to the dilemmas presented in the field work, is the fact that the hypothetical cases show one practical example of Big Data and Neuromarketing techniques applied as part of an organization's strategy. These are two wide strategies that involve various techniques, which also makes it harder to ask a customer's opinion about its overall execution. The question "Is Neuromarketing/Big Data ethical according to customers?" has been investigated in previous studies, but it is a difficult, or even a superficial question to ask directly to the customer. Their ethical perception of the strategy doesn't just depend on the definition of the strategy but also, as concluded above, on the context, organization and purpose. This is why individual cases where the strategies are applied in different manners should be used to infer detailed conclusions about their ethical implications.

Additionally, a customer segmentation is recommended to better understand the differences in the subject of ethics for different demographics. This study has investigated the ethical perception of Generation Z customers residents in Spain over of the presented issues and recommends a similar study to be done with Millennials and Generation X in order to document differences and similarities. If it is be demonstrated that older generations show a more deontological approach in Big Data ethics than Generation Z, it can be argued that issues such as privacy online do start to lose importance in the ethical judgment of younger generations. As the majority of the utilitarian participants mentioned during the interviews, an exchange is expected with

companies in order for them to offer their clients the highest satisfaction, and they would consider the collection and treatment of personal data to be a reasonable price to pay.

Finally, another area of possible study is the relation of these ethical perceptions to the customer's final behavior. This study has gathered their perception; what they would find ethical/unethical about the employment of the discussed strategies. But as Participant 4 (Annex 5) suggested during an interview, there might be cases where the behavior of the customer is not in accordance with what they consider the most ethical. Though it might be a controversial area to explore, the extends to which customers will tolerate or support unethical actions taken by organizations in exchange for the highest satisfaction or the best price can be investigated further.

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7. Timing

The following table demonstrates the timing for the design, research, field work and results analysis of the study.

Task	December	January	February	March	April	May	June
Theoretical Framework							
Definition of research question and objectives	▓						
Analysis of previous studies	▓						
Drafting of the theoretical framework	▓	▓					
Field work							
Defining the population and sample		▓					
Defining the sampling method		▓					
Preparation of survey questions			▓				
Preparation of the script for focus group			▓				
Realization of interviews				▓			
Realization of the focus group				▓			
Analysis of the results							
Interview results analysis					▓		
Focus group results analysis					▓	▓	
Conclusions							
Interpretation of the results						▓	
Revisiting of the research question and hypothesis						▓	▓
Feedback and corrections							▓

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