ERASMUS UNIVERSITEIT ROTTERDAM

Erasmus School of Economics

Msc. Marketing

The effect of monetary promotion (percentage discount and free shipping) on consumer's purchase intention, an email retargeting context.

The moderating role of customer loyalty

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Abstract

Cart abandonment is still a major issue in the world of digital marketing today, with serious financial repercussions for online retailers. This thesis examines the impact of email retargeting on consumer purchase intent, particularly when used in conjunction with monetary promotions like free shipping and percentage discounts. Separating between new and old customers, it looks into the moderating impact of customer loyalty. The results imply that contextual elements and client loyalty levels affect how effective these retargeting methods are. The research underlines the significance of retargeting efforts being specifically tailored to various consumer segments in the extremely competitive e-commerce sector, providing marketers with insightful information that will enable more efficient retargeting campaigns and enhanced customer retention tactics. Nonetheless, it's important to acknowledge the study's limitations, including sample representativeness and experimental constraints. Future studies should dive further into non-monetary promotions, different forms of monetary promotions, and the effects of certain products on purchase intention.

Word of thanks

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1. Introduction

In the digital marketing landscape, online retargeting efforts have gained significant importance, with cart abandonment emails boasting a 49% open rate and a 10.7% conversion rate in 2022 (Barilliance, 2022). Moreover, businesses have increasingly recognized the value of customer retention over acquiring new prospects, as statistics indicate that 60% to 70% of sales are likely to come from current customers compared to 5% to 20% for new prospects (Reibstein, D. et al., 2014). The global digital buying trends have also seen substantial growth, with an estimated expenditure of 603.68 billion USD by digital buyers in 2022, with a promising projection of 7.391 trillion USD by 2025 (eMarketeer, 2022).

Nevertheless, despite these trends, the average global conversion rates remain dismally low, clocking in at less than 4.6% across industries (Statista, 2023). One significant factor contributing to these low rates is the pervasive issue of shopping cart abandonment, with a staggering worldwide online shopping cart abandonment rate of 69.82% in 2021 (Statista, 2022). This means that nearly 70% of shoppers initiate the checkout process but fail to complete it. Additionally, abandoned shopping carts represent a substantial loss, with reports suggesting approximately $1 billion annually for e-commerce companies (Snapshot, R.I., 2015).

Since companies face this scenario, the implementation of discounts and promotions can have a significant impact on conversion rates (Raitaluoto, T., 2023). Promotions have an important role in the ecommerce world. Platforms rely on promotional activities and strategies consisting of a wider varieties and more frequently than traditional retailers, which generally launch the vast majority of their promotional events around holidays (Tong et al., 2022). The main reason of this is due the intense online competition, the e-commerce landscape is extremely tough. According to Statista (2022), around 40% of e-commerce companies considered their market competition level as very hard and as a result, the e-commerce business strategy often is to use promotions in order to stand out in the crowded markets, attract new customers and to maintain existing ones.

Having the previous scenario described into account, companies tend to address the low conversion rates by focusing on the phenome of the online shopping cart abandonment

(Zarouali, B. et al., 2017). The most common strategy it is the retargeting which usually is expressed on serving online banner ads browsing the website or sending an email directly remind them about their uncompleted purchase. (Gopalakrishnan, A. & Park, YH., 2022).

Current academic literature has focused on studying the extensive on the online banner ads. About the email retargeting has been more focused on personalization, time-frame and design of the content (Zhang et al., 2020; Li et al., 2021), but not much on the effectiveness of promotions to finalize the purchase. In parallel, literature has explored more into the targeting and it has been able to determine the relationship between purchase intention and the usage of scarcity elements or price promotions (Li et al., 2019) or the effect of the type of good and promotion on the likelihood of the customers (Gonzalez et al., 2014) too. Despite the evidence on the targeting, there is not much research done on the impact that can have the wide type of promotions on the card abandonment (Gopalakrishnan & Park, 2022).

At the same time, it is essential to recognize that the effectiveness of such initiative may vary significantly depending on the level of customer loyalty (Närvänen et al., 2020). This distinction becomes particularly pertinent when considering how to tailor retargeting efforts. From one perspective of distinguish within new and old customers, the last mentioned group have already shopping experience with the checkout process of the website and, they are less likely vulnerable to online shopping hesitation (Cho, Kang & Cheon, 2006), while the for the new ones is the opposite scenario. In this sense, del Rio Olivares et al. (2018) identified that new customers tend to real positive whenever they are targeted with discounts within 5% to 35%. Nevertheless, there has not been made yet more studies regarding how the customer loyalty might moderate the response of the customers whenever they are email retargeted with promotions.

Based on all the previous described, the gap that this thesis plans to fill is the one of the influence of email retargeting to abandoned online shopping carts with promotions on the purchase intention. To be more precise, by analyzing the moderating role of the customer loyalty expressed within new or previous customers. Prior research has shown that personalization is effective to address online shopping cart abandonment (OSCA) retargeting. By adding a personalized offer on the retargeting, its lead in a higher purchase

lift. Nevertheless, the experiment was thrown via a mobile short message service (SMS) for an online retailer (Gopalakrishnan & Park, 2022) and there was no a concluding answer withing monetary or non-monetary promotion. As a result, the following research will be answering to the question:

How does retargeting, via email, with monetary promotions affect consumer purchase intention? Is this impact mediated by the customer loyalty: being a new or old customer?

By answering the research question, researchers will be able to have as reference this paper for further studies into the effectiveness of the usage from monetary promotions on retargeting OSCA taking into account the customer loyalty level.

Additionally, this study promises to improve marketers' capacity to develop more successful remarketing strategies and allocate their expenditures more effectively. Given that consumers react differently to different marketing kinds in different situations (Chandon et al., 2000; Kwok and Uncles, 2005), this research aims to provide marketers with a solid platform upon which to build comprehensive retargeting guidelines. In addition to enabling businesses to increase conversion rates, such rules will also aid them in navigating the rapidly changing digital market, where competition is fierce and consumer preferences are continuously changing. This study seeks to provide useful advice to business managers who struggle to maximize retargeting efforts and stand out in the face of intense competition in the e-commerce market.

Figure 1 presents the conceptual mode, that will be further explained in the literature review. In this thesis, the effect of email retargeting with monetary promotions on purchase intention will be studied and the moderating role of customer loyalty expressed by either new or previous buyer will be examined.

Figure 1: Conceptual model research
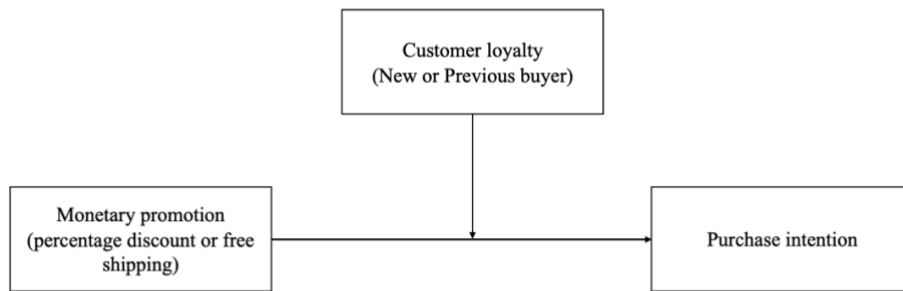
2. Literature review

2.1. Online shopping cart abandonment

2.1.1. Definition
There have been studies conducted on the phenomenon of abandoning online shopping carts. Egeln and Joseph (2012) propose two possible ways to see it: as a behavioral or as technological variable, this study is going to be focused on the first one. According to Sondhi (2000), it refers to when a person visits a website, adds items they want to purchase to the cart, but ends up not actually buying them. Cho et al. (2006) describe this as a situation where someone enters an online store with the intention of making a purchase but ultimately leaves without completing the transaction, thus abandoning their initial intention to buy. A similar viewpoint is held by Moore and Matthews (2006), who emphasize the act of adding products to the cart to gather information, but then abandoning them before completing the checkout process. To Ouellet (2010), it involves initiating the checkout process but never finishing, while Kulkarni (2019) explains it as when potential customers add items to their cart but end up abandoning them at the end of the sales funnel. These definitions essentially revolve around 1) the act of selecting products but 2) not following through with payment (Egeln and Joseph, 2012). The consider one will be the definition provided by Kukar-Kinney and Close (2010): it pertains to customers adding items to their online shopping cart but then leaving the retailer's website without making a purchase during that session.

2.1.2. Shopping cart usage
In the same way, the purposes of the usage from shopping cart can explain why does this end up happening. On first instance, people who go online tend to use the shopping cart with the intention to research but without a real intention of buying (Erdil, 2018). As a result, it turns on being a convenient research tool and even a recent study proves that the main motive for online shopping is easy search ability (Punj and Moore, 2009).

Close and Kukar-Kinney (2010) add that the shopping cart behaves as a "wish list". They propose that it is used more as a temporarily storage tool where the consumers can place items that later they are going to consider purchasing. This is why the usage of shopping cart turns out being as an organizational tool. Additionally, the authors state that people can also use them as a shortcut to quickly return to the products, without the need to

search for them again, and as a tool to track prices and even compare them with other websites.

Lastly, the most common tend to be the entertainment purpose. The origin of this relies on the hedonic component of online shopping since it provides the chance to escape boredom (Wolfinbarger, M. et al., 2001) and by placing items, pleasure can be obtained (Mathwick et al., 2001). Based on that, Close and Kukar-Kinney (2010) proposes that consumers add products to their carts out of boredom, pleasure or enjoyment.

2.1.3. Determinants of shopping cart abandonment

On another side, the determinants for shopping cart abandonment have been investigated. Based on the usages of the shopping cart, it is possible to conclude the determinants too and others were found.

In the context of e-commerce, consumers have a goal while they visit a website and this is to shop online (Bloch et al., 1986). Taking into account the described usage of the shopping cart as a research and organization tool, there are visitors which their goal is not to end up acquiring a product. Since they don't have that need, the lack of urgency appears. This is translated into a more disposal of time and, for Tellis (1986), it means the presence of price sensitivity. As such, this group is more willing to hold out for a discount or a drop in the price of the item or items in their cart (Kukar-Kinney, M & Close, AG., 2010; Rausch, T. et al., 2022). Continuing with the behavioral determinant, a side effect is that consumers compare on different websites, the products in terms of prices too (Alam, A. et al, 2020). All in all, the result will be end up being an abandonment of the shopping cart.

By taking into account the previous mentioned regard the willingness for a matter of price, another determinant comes out: the concern of the total cost (Kukar-Kinney, M & Close, AG., 2010). Aside just the item's price, there is an aggregate cost for the concepts of handling, shipping, tax (if applicable), and others fees such as different packaging material, to aggregate a note on it, etc., that increase the overall cost. The final order's total price, which tends to be shown at the end of the shopping process, may deter or prevent customers from making a purchase (Li and Chatterjee, 2005; Magill, 2005; Xia and Monroe, 2004). As a consequence, the usage of the cart turns out being a research

and organizational one which it does not lead into purchasing the item(s) in the cart right away (Kukar-Kinney, M & Close, AG., 2010).

Using the shopping cart for entertainment purposes also it becomes a determinant (Kukar-Kinney, M & Close, AG., 2010). Shoppers have hedonic motivations in their consumer behavior (Westbrook and Black, 1985) and this has been taken also into the world of e-commerce (Cho et al., 2006). According to Kim and Shim (2002), people who buy online are not just doing it to find out information and make purchases. Additionally, they are meeting the demands of emotion and experience. As stated by the research of Parsons (2002), online buyers who see shopping as a form of recreation are less likely to buy due the personal intention they actually have.

Lastly, Rajamma et al. (2009) talk about the roles of three factors that origins shop cart abandonment: perceived waiting time (Davis and Heineke, 1998), perceived risk (Bélanger *et al.*, 2002) and transaction inconvenient (Childers *et al.*, 2001; Donthu and Garcia, 1999; Srinivasan *et al.*, 2002). About the first one, online shoppers are described as convenience seekers whose goal is to save time (Childers *et al.*, 2001; Wolfinbarger and Gilly, 2001; Balabanis and Vassileiou, 1999). Since they demand a rapid shopping experience, thus a delay and a rise in actual waiting time, or their perception of it, is likely to disprove this. Their disappointment as a result causes them to abandon the shopping cart (Rajamma et al., 2009). Secondly, within the different perceived risks, the most common one is: financial risk (Zhou et al. 2007). Most of web shops ask for the customers to give personal and financial information (credit card most likely) before the acceptance of the orders and the end of the checkout process (Xie et al. 2006). If the site does not fulfill consumers' security expectations, it is going to influence negatively their intention to purchase and aborting the shopping process (Kukar-Kinney, M & Close, AG., 2010). Regarding the last: transaction inconvenient, a key role is played by the different components of the checkout process. The presence of long registration forms to complete, late shipping and handling cost disclosures, out-of-stock product disclosures at checkout, order-bouncing technical issues, absence of other payment methods and more are the factors that generate dissatisfaction (Seiders et al., 2000; Harrison-Walker, 2002). Thus, a higher propensity to abandon the shopping cart.

2.2.   Retargeting

A type of behavioral targeting is retargeting, and it is mostly applies to online advertising. This practice frequently entails displaying an advertisement to a buyer who was just looking at the same or a comparable product on the website. Lambrecht & Tucker (2013) found that there is a positive correlation between appealing to the customers with products they have browsed before. Thanks to the cookies nowadays, it is possible for the companies to display ads on other websites after a person has done any research on their own site (Yaveroglu & Donthu, 2008).

This is considered as a firm-initiated channel, but also retargeting via email since this involves to any marketing intervention that the companies decide to implement in order to approach their customers (Wiesel et al., 2011; Li and Kannan, 2014). While some authors found there is a negative impact on the response rate (Mattioli, 2012; Li and Kannan, 2014), others claim the opposite. An example it is that the conversation rate can turn out being 100% higher at comparing someone who has been e-mailed retarget versus one who hasn't (Peterson, 2011; Choi, 2013). Since it is a triggered email, this is a marketing automatization that takes place and it is considered as a sort of *"one-to-one"* marketing, which is a new step for the email marketing (Chaffey & Ellis-Chadwick, 2016). By triggering emails to address cart abandonment, customers can have an interaction with the email by clicking on one, or more, of the components since they have links attached on it (Zhang et al., 2017).

2.2.1. Time-frame element
Golfard (2014) emphasized the timing component on the retargeting. The perspective of analyzing the retargeting timeframe is in terms of different units of time. In terms of weeks, Bleier & Eisenbeiss (2015) found that, retargeted ads have a positive effect but can be ineffective as days go by since the last visit. On a next level, in terms of days retargeted ads have a positive effect for consumers who browsed the website if they are dynamic (Lambrecht & Tucker, 2013), it can have a negative effect if the user does not have already an account (Hoban and Bucklin, 2015) and it can be even effective on the first day of the first week (Sahni, Narayanan, and Kalyanam, 2019). Nevertheless, Li et al. (2021) were able to find, in an experiment, the impact of using ads and automatized

emails. In an hour scale, they found that early retargeting ads which are within 30 minutes to one hour have a negative impact, while later ones (1 to 3 days) have a positive effect.

2.2.2. Personalization

Advertising personalization is the practice of businesses tailoring their advertisements to the preferences of consumers in an effort to draw customers and persuade them to buy a product from the advertiser (Ansari and Mela 2003; Arora et al. 2008). Online customization techniques use a consumer's online browsing history to target advertisements to their presumed tastes, this because since the way you browse can be a good indicator of how your preferences will influence what you buy (Wang et al. 2009).

When is about ads, on a first level Joshi, Bagherjeiran, and Ratnaparkhi (2011) proved that by using user characteristics, such as demographics and website researches, can improve the right allocation of the retargeting ads in different websites. Bleier & Eisenbeiss (2015) also verified that, particularly at an early information stage of the purchase decision process, personalization boosts click-through. Also, if a customer has just visited the advertiser's online store, it is more effective a high degree of content personalization (DCP) on the banner. The mentioned authors shared in common that an overpersonalization makes lose the effectiveness from the retargeting, a medium degree it's the most effective. This has been backed up by Van Doorn & Hoekstra (2013) because their research they validated that using personal information, like previous data from customers' transactions, in an ad has a negative influence on its purchase intention.

About the other channel, emailing, Sahni et al. (2018) conducted an empirical study that examined how including the recipient's name in emails affects sales leads generation and unsubscription rates. They discovered a significant positive effect, which can be explained by the fact that personal information directs attention, may act as a helpful cue for the recipient, and may increase elaboration. In the same sense, Wattal et al. (2012) found that personalization is less successful, or even harmful, when the client is less familiar with the firm, despite the fact that the data demonstrate that personalization increases the effectiveness of emails in terms of click through rate and open rate.

2.2.3. Customer segmentation: new vs. existing customers

As mentioned before, the familiarity element between the company and customers can play a role in the effectiveness of retargeting. Malthouse and Elsner (2006) developed the idea of sub-segments within the customers. In one of their focuses, they were able to distinguish within existing and new customers, but elaborated more in this last group. They showed that for newer customers, it is better to use the "labeling hypothesis". This last consist of guessing which segment they can be and address them with a customized offer rather than with a generic one.

Similarly, Brand and Raush (2022) were able to make a research based on abandonment mobile shopping cart and differentiating between new and old customers. A result was that by using mobile devices, the probability of abandoning the shopping cart is stronger for new shoppers, compared to past ones who already know the website's checkout. Even for the new customers, there is a decreasing probability of not completing their purchase with every stage of the checkout process onsite. Moreover, in terms of items in the cart, they saw that as more items are added to the basket, the likelihood of new clients quitting their online shopping cart decreases, in contrast to returning customers. Lastly, they suggest to develop the idea of offering, via retargeting, a free shipping or coupons in order to help them overcome internal conflicts that they might be experiencing. In the next point, it will be more developed this idea.

2.3. Promotional incentives

In the e-commerce world, it is possible to see that different companies apply promotions. Alvarez and Casielles (2005) were able to identify that promotions have an important role in influencing customers' purchase intention. In this sense, it has also been possible to identify two types of promotions: monetary and non-monetary (Chandon et al., 2000; Kwok and Uncles, 2005). In this sense, Chandon et al. (2000) and Kwok and Uncles (2005) described promotions as short-term and tangible incentive that can be monetary and non-monetary which can directly affect consumer behavior.

2.3.1. Type of promotions: monetary vs. non-monetary
2.3.1.1. Non-monetary

Because they are associated with fun, experience, and enjoyment, non-monetary promotions have hedonic benefits, which are non-instrumental, experimental, and

emotive in nature (Hardesty and Bearden, 2003). Additionally, it involves a more relationship-based and delayed rewards which are usually shown as free gifts, contests and premiums (Kwok & Uncles, 2005; Sundström et al, 2013).

Different authors elaborated on the advantages and disadvantages from the non-monetary. On one side, this has a positive impact on the brand value since enhances it, due the relationship-based is possible to provide an experience and in terms of long-run, the brand this is advantageous for the brand attitude (Mela et al.,1997; Yi and Yoo, 2011; Buil et al., 2013). On the other hand, also it is stated that before and after the offer period, it may give customers a false impression. A consequence is the existence of losing loyal consumers due this (Liu, Cheng, and Ni, 2011).

2.3.1.2.   Monetary

On the other hand, monetary promotions, which are usually seen as discounts and free-shipping, are focused primarily with utilitarian benefits and this has an instrumental, functional and cognitive nature (Kwok & Uncles, 2005). Since being quite common to see, and the most traditional ones, nowadays customers expect to see this price deals (Hardesty and Bearden, 2003).

Just like non-monetary, there are pros and cons about their usage. Regarding the advantage, it has been found that in terms of utilitarian products are more effective the monetary promotions (Chandon et al., 2000). In the same sense, the effectiveness has a positive correlation with a high awareness of the brand (Alnazer, 2013) and a high benefit perceived by the consumers (Palazon and Delgado-Ballaster, 2009). Going along with the consumer's perception, since it can be evaluated in terms of their monetary value, it gives the impression that they are advantageous (Sinha and Smith, 2000).

For purposes of this research, the monetary promotions will be taken into account. Even the way in which they are distributed is through coupons (Oliver and Shor, 2003). These are a very appealing marketing technique for companies due to their low cost of creation and delivery and simplicity of distribution to a wide number of customers (Friedrich et al., 2009). Nielsen (1965) found five aspects of coupons that affect how often they are redeemed, these are: method of distribution, size of product class, the rate of discount, the face value of coupon and brand distribution. Focusing on the method distribution,

Jung and Lee (2010) found that the online coupon redemption rate is higher compared to the offline and this thanks to the email distribution. Additionally, they were able to see that online users, in the age interval of 20 to 30 years old, had a greater coupon redemption. Moreover, as Nielsen states, the face value of the coupon can have different definitions. In the next point it will be more elaborated those.

Kukar-Kinney, M & Close, AG. (2010) took into account the point of view from monetary incentives and they proposed *price promotions carts* which they defined it as "*the extent to which consumers place items in their online shopping carts in order to view or take advantage of retail offers that lower the overall purchase cost, such as sales, price promotions, and free shipping*". Later on, Gonzalez et al. (2014) decided to explore into the framing of the price promotions by being presented as amount off or percentage off.

2.3.1.2.1.   Amount off vs. Percentage off

In the e-commerce world, it is a common format to show the price promotions either by amount or percentage off. Regarding the effectiveness of each, previous studies have been made and they are going to be presented in the following paragraphs.

From a first perspective, Della Bitta et al. (1981) formulates that amount off is better than the percentage off. Two large experiments were conducted to examinate eight different messages communicating a deal, product price and percentage discount. From the means obtained on the eight conditions, which each was a different message, it was possible to conclude that compared to percentage off, dollar off condition was more successful at increasing value perceptions.

Another point of view giving is about the no difference between percentage and amount off. For a high-priced item (a computer) and a low-priced item (such as a floppy disk), Chen et al. (1998) experimented with the image associated with an amount off versus % off discount. A reference price and a 10% (or equal dollar) discount for each products were provided to participants in the pricing campaign. Additionally, these participants had been aware of a product which was 25% cheaper compared to the evaluated product's reference price. These authors observed no statistically significant difference between discounts offered in dollars versus percentage terms for either the high or low priced items in terms of purchase intentions (Gonzalez et al., 2014). Consequentially, DelVecchio et

al. (2007) conducted a study where participants were presented with a choice task involving six shampoos. The promoted product was manipulated to have either a high or low discount depth, displayed as either a percentage off or an amount off. The findings revealed that the discount depth significantly influenced by consumer choice, while the promotion frame had no notable impact (Gonzalez et al., 2014).

However, there is more literature in terms of mixed results. In a study by McKechnie et al. (2012), two experiments were conducted to investigate the impact of discount frames and sizes. The findings revealed that when dealing with low-priced products, presenting the discount in percentage format led to increased perceptions of value and greater purchase intentions. Conversely, for high-priced products, presenting the discount in absolute amount format resulted in higher transaction value. The same perspective had it Gendall et al. (2006). They examined the impact of different discount types on consumer choices across four product types. Participants were presented with three options for each product type: no discount, a percentage off, and an equivalent discount in dollars. The findings showed that the dollar amount discount increased the selection of high-priced products. Notably, for one of the low-priced products (potato chips), the percentage off discount had a stronger influence compared to the dollar amount discount (Gonzalez et al., 2014).

These previous investigations allowed to Gonzalez et al (2014) to realize their study. They propose "absolute number heuristic" which consists in the evaluation of the absolute number of a discount. Thanks to three different experiments, they conclude the following: for a high-priced product (price over $100), consumers appreciate the offer when the discount is presented as amount off; for a lower-priced product (less than $100), shows that it's more effective the percentage off.

2.3.1.2.2.   Free shipping
A proven method to improve the e-commerce operations it is through offering Free shipping (FS). There are 3 well-known shipping policies: unconditional FS (UFS), contingent FS (CFS) and shipping fees that have a positive relationship with the order size (Leng and Becerril-Arreola, 2010). In terms of who is responsible for the shipping cost, with UFS the retailer absorbs everything, with CFS only the orders with the amount

equal to or above the cutoff level and with the last one, the consumers cover all the expenses (Leng and Becerril-Arreola, 2010).

Lewis (2006[1]) found that, within the three policies, CFS is the most effective in order to increase the revenues. This goes along with the fact that CFS is the middle point between the existing policies which turns out to be quite favorable for the companies. Additionally, he realized that purchase frequency is higher and order size is smaller when shipping is free as opposed to when shipping rates are based on order size. In the same way, Lewis, Singh and Fay (2006) analyzed a website that sells nonperishable grocery and drugstore products. When compared to shipping prices that change depending on order quantity, they found that free delivery reduces order size while boosting the likelihood of a purchase. On the other hand, in an experimental investigation of price promotions, Chandran and Morwitz (2006) discovered more sensitivity to shipping costs than pricing. Moreover, Chen and Ngwe (2018) were able to conclude that more than offering a free shipping, providing a contingent free shipping leads to an increase of basket size since the customers do need to meet the minimum order threshold.

All in all, the literature suggests the effectiveness of a free shipping policy. Nevertheless, when it is about in terms for retargeting there is not much found just besides the suggestions from different authors about giving a free shipping as retargeting strategy (Kukar-Kinney, M & Close, AG., 2010; Rausch, T. et al. & Brand, B., 2022). It is in this way that this study is going to be focusing on UFS and CFS.

3. Hypothesis

Chapter one discusses the problem statement and the main research question for this study and chapter two the main findings regarding the elements that this study is taking into account. This chapter will enlarge on those subjects by producing research research-supported hypotheses. To "*increase our understanding of the optimal promotional strategy to encourage customers to complete purchases and not leave their shopping carts empty*", as stated in chapter one, is the key problem that this research aims to address.

3.1. Promotion Types and Cart Abandonment

As expressed on the previous section, the literature review shows a conflict within the effectiveness of the different kind of monetary promotions. As stated by different authors, there is a group of customers that are willing to hold out for a discount or drop in the price of the item(s) in their cart (Kukar-Kinney, M & Close, AG., 2010; Rausch, T. et al. & Brand, B., 2022). At the same time, another determinant is the overall costs at the end of the transaction which shipping fees tend to be a factor that might lead to abandonment (Kukar-Kinney, M & Close, AG., 2010, Li and Chatterjee, 2005; Magill, 2005; Xia and Monroe, 2004).

By taking into account this perspective, Diamond and Sanyal (1990) stated that people tend to prefer percentage deals over a buy-one-get-one (BOGO) deal by taking into account the prospect theory from Kahneman & Tversky (1979). In line with this study, Gordon-Hecker et al. (2020) concluded that the promotions that give an additional gain, such as buy-one-get-one (BOGO), are preferred by the customers compared to a percentage discount. Even when the deals are equal in terms of net value. This additional gain can be also been seen in the free shipping strategy (Singh and Fay, 2006), thus it can be concluded that free shipping (a non-discount promotion) has a higher impact on the purchase intention compared a discount promotion (expressed in a percentage).

Raghubir (2004) studied the relationship within a discount and purchase intention and this can have a positive impact as long as the amount of discount does not represent a high amount for the customer. Similarly, Eisenbeiss et al. (2015) analyzed Deal-of-the-day (DoD) promotions, price discounts mainly, and type of products in the retail industry.

They found that the discount level increases promotional effectiveness for utilitarian more than for hedonic products.

Two hypothesis are developed based on the previous described on which type of promotion is more effective:

H1a: The impact of discount on reducing card abandonment is higher compared to free shipping.
H1b: The impact of free shipping on reducing card abandonment is higher compared to discount

3.2.   Moderator: Customer Loyalty - New vs. old customer and cart abandonment

As Brand and Raush (2022) showed in their study, there is a difference in the abandonment shopping behavior from the shoppers. By distinguishing between new and old customers, it is possible to address them differently and with the right strategy. Despite Malthouse and Elsner (2006) couldn't determine which is the best way to approach new customers by just beside a "labeling hypothesis", del Rio Olivares et al. (2018) identified that this group of people reacts positively to moderate initial discounts within 5% - 35% off. In the same way, Lewis (2006[2]) reflected on the percentage discounts and was able to find that within existent clients from an online and newspaper client's dataset, there was a positive reaction after being retargeted with a discount.

Moreover, Mela et al. (1997) thrown an experiment in order to analyze the effects of promotions on consumers' brand choice behavior. By separating the customers within loyal and non-loyal, they concluded that price promotions make both type of customers sensitive to prices in the long-term. In line with this study, Palazon et al. (2009) emphasizes how important client loyalty is in determining how well sales promotion methods work. Loyal customers who have a strong connection to a brand may respond to promotions differently than more price-sensitive or irregular shoppers.

The result from the all previous mentioned, the following hypothesis are presented:

H2a: The impact of discounts on reducing card abandonment is higher for new customers compared to old ones.

H2b: The impact of discounts on reducing card abandonment is lower for old customers compared to new ones.

H3a: The impact of free shipping on reducing card abandonment is higher for new customers compared to old ones.

H2b: The impact of free shipping on reducing card abandonment is lower for old customers compared to new ones.

4. Research procedure

The main objective of this study is to find out which promotion—free shipping or a percentage discount—increases the likelihood that customers who receive email retargeting messages after leaving their shopping cart would make a purchase.

4.1. Research design

The following chapter focuses on the research design for this thesis and covers the promotional message's content and layout, the different scenarios for the manipulations, the data collection and the research sample. Moreover, the mediating function of the client type (new or existing customer) is examined in order to determine which promotion is most effective for each type.

The best method is an experiment since it allows for the manipulation of the two types of clients and promotions that respondents receive in their email designs for actual clients and promotions that respondents might encounter. In order to investigate the connections described in the hypotheses, the experiment will be based on a questionnaire. The research setup and the methodology will be thoroughly detailed in the sentences that follow.

4.1.1. Content and design of the experiment

Firstly, due to the context of the channel in this research, which is email retargeting, it has been chosen to use the triggered emails from the marketplace worldwide known: Amazon. It is in this way that the layout of the email will follow that structure. Nevertheless, for the experiment, the email will come from a hypothetical brand in order to maintain the neutrality of the experiment. The transaction that will be used is the discrete one. Discrete transactions are distinctive in that they stand for independent transactions that take place within a predetermined duration. Unlike other transaction types, after each discrete transaction is finished, neither the buyer nor the seller are obligated to engage in any additional transactions (Cassia, F. et al., 2021). Moreover, the product type to be taken into account is clothing. The reason is that clothing is considered to have a mid-level of involvement, letting the buyer and seller proceed to a relational exchange and allowing a

discrete transaction (Assael, 1998). Lastly, the price given to the product will be of 30 euros.

Every respondent is assigned to 1 type of customer (new or old) and 1 promotion (15% off or free shipping), thus one specific scenario. The experiment will be based on a 2x2 between-subjects design. As stated by Farnsworth (2019), it is not desirable for participants to be aware of the specific purpose of the study, since this could skew their responses. By applying a between-subject design, this last mentioned it is avoided, and the transfer of knowledge between treatments is prevented.

4.1.2. Content and design of the promotional message

4.1.2.1. Free Shipping framing
In the promotional message, it has been taken into account how to frame the free shipping and the amount of the discount. The relative efficiency of framing a shipping promotion as *"no shipping fees"* versus *"free shipping"* may depend on the temporal proximity of the promotional offer, according to research by Kulkarni (2020). He came to the conclusion that it is generally more successful to frame a promotion as having *"no shipping fees"* while it is already being offered. Contrarily, framing the promotion as *"free delivery"* is relatively more effective if it is available in the reasonably near future. But he also came to the conclusion that calling it *"free shipping"* might make customers view it favorably as a chance to get a desirable reward. For that reason, the framing chosen is *"free shipping"*.

4.1.2.2. Percentage Discount framing
In regard to the discount promotion, Chen, S. et al. (1998) conducted a study on how the framing of price promotion messaging affects consumer perceptions and purchase intentions. They discovered that a price drop expressed in percentage terms for low-priced goods appeared to be more meaningful than a similar price reduction expressed in dollar terms, while the opposite was applicable to high-priced goods. Additionally, Palazón and Delgado (2009) studied price consciousness in the promotional effectiveness framework at two different levels: moderate (20% off) and high (50% off). They were able to identify that at a moderate benefit level (20% off), price discounts are equally effective for high and low price conscious consumers. Nevertheless, since this discount amount will be

compared with the free shipping benefit, it is needed to align both in the same terms of value and this will be via a pre-test.

4.1.3. Pre-test design

In order for the experiment to take place, it is needed to throw this pre-test for making sure that the value perceived for the respondents will be the same within a free shipping or the discount.

In this sense, the pre-test consisted in a survey that was asking one question. It was stated to the respondent to imagine themselves in the scenario that a clothing company has sent them an email after abandoning their shopping cart. After it, the question asked for which would be the amount of discount that would make them switch a free shipping for it. A condition was made for the free shipping: the order had to be above 30 euros. It is in this way that the price of the item for the survey is also playing a role in this pre-test. Regarding the answers, it was given to 3 options: 5%, 10% and 15%. The reason why not 20% or more is because of the impact on the margin on the revenue from this order. Additionally, as previous research stated about customer behavior: the higher the discount, the preferred for the customers (Haghighatnia et al., 2018; Shen et al., 2017; Fudenberg et al., 2006) . A sample of 43 respondents was collected. Figure 2 shows the result of the pre-test.

Figure 2: Pre-test results

As previously stated, respondents preferred the highest amount of discounts. The selected amount of discount for the experiment will be 15% off since it is the one with most votes, around 47% compared to a 44% obtained by 10% off

4.2.   Data collection

Using the software program Qualtrics, an online questionnaire is executed for the experiment. The survey will be sent to the respondents via social media. As a consequence of this, a non-probability sampling procedure is used, which is named as "judgement sampling". According to Laerd Dissertation (2012), this method is more time-efficient, it also assures more commitment among the respondents, and it is easier to identify and collect the right respondents. Nevertheless, this sampling method could compromise the sample's representativeness and influence the conclusions too (Laerd Dissertation, 2012). Due to the aim of executing an ANOVA-analysis, a total of 30 respondents in each scenario is the goal due to the limited resources of time and resources. For that reason, a total of 120 answers are needed (30x4).

The survey consists of four parts. The first part is an introduction explaining the purpose of the survey and letting the participants know about risks, eligibility and confidentiality. The first question in this part describes requesting the consent of the respondents. The second part is the presentation of one of the four designed scenarios. In this section comes up a between-subjects manipulation. In order to assure more reliable answers, by implementing them, it is assured that the respondents are not going to be aware of what is being manipulated (Smits, 2015). The implication is that each of them is assigned to one type of customer and one type of promotion. Despite the different scenarios, the structure will remain the same: instructions, an email retargeting template, and a question. This question will measure the dependent variable, purchase intention. Using a *Likert scale* will be the tool to measure the question. The scale has seven answers that will range from "strongly disagree" to "strongly agree". Respondents will be asked to indicate a degree of agreement or disagreement. According to Malhotra and Birks (2007), it is suggested to scale between five and nine. They also stated that most respondents are not able to handle more than a few categories, but due to the judgment sampling, the respondents will be familiar with this type of question. As a result, it has been chosen to set up one of the 7. In the third part, this will be a manipulation check section. In this, the person filling up the questionary will be asked to answer which type of consumer and promotion were given to him. This is important since, in order for their answers to be taken into account in the analysis, they should match within the scenario given and the manipulation check. Lastly, the last section will gather information about control

variables: gender, age, and level of education. On appendix 2 is possible to find the design of the survey.

4.3.   Descriptive statistics

As mentioned, the software program to collect the answers is Qualtrics. The final data set betrayed from it consists in different variables. Not all of these are taken into account for the analysis since they do not bring any contribution for the research. Among those it is possible to find: IP location, Respondent ID, Date, Progress, etc. Next it will be discussed the ones who are taken into account.

Firstly, the independent variable: monetary promotion, either percentage discount or free shipping. The type of variable from this is categorical. The values that this takes is either 1 if it's a percentage discount or 0, free shipping. From a total of 160 surveys that completed all the questionary, 81 were given a free shipping as an email retargeting promotion and 79, a percentage discount. About the moderator, there is customer loyalty expressed as new or old customer. For this categorical variable, it will be taking a value of 1 if it's an old one and 0, a new one. Out of the total, 76 were assigned the new customer type and 84 old customer. The distribution of the number of respondents per scenario is shown in the next table.

Table 1: Number of respondents per scenario

Scenario	Nº respondents
New customer and free shipping	37
New customer and percentage discount	39
Old customer and free shipping	44
Old customer and percentage discount	40

Thirdly, the dependent variable is purchase intention. According to Farris et al. (2010), this is defined as a specific measure or rating of consumers' stated purchase likelihood. For this study, the variable is continuous and the way it has been measured it is through one statement. Respondents were asked about their likelihood to purchase the item of the experiment on a seven-point Likert scale that take the value of 1, which means extremely

unlikely, until 7 (extremely likely). The mean is 4.38 which indicates that participants "neither likely nor unlikely" to the statement.

Regarding the control variables, for the experiment there were three: age, gender and study degree. The descriptive statistics for these variables are shown in table A.1., table A.2. and table A.3. (appendix 3). About age, this is a categorial variable and the measure unit is in years. Around 91% of the respondents in the questionary are between 19 to 29 years old. Next almost 8% answered that their age is between 30 to 39 years old and only about 1% 18 or younger. Something to outstand is that there were no participants who are aged 40 or older. In the case for gender, three options were given: male, female and prefer not to say. For the male gender, almost 63% of the respondents identify themselves in that way and the rest female. Nevertheless, there is one respondent that preferred not to say the gender which he/she identify with. Lastly, regarding the study degree obtained there were five options. Around 54% of the respondents have obtained a bachelor degree, followed by a 34% with a master degree and the rest from a high school. Something to point out is the fact any respondent has obtained the doctoral degree.

Over the 160 respondents, the total number, there were 35 which didn't at least one of the manipulation checks. In other words, they did not remember which were the conditions given to them for the scenario assigned. In more detail, there were 4 that failed both manipulations and other 31 respondents did not answer correctly when they were asked about the promotion or type of customer given. The fact that about 22% of the total responses did not go through the manipulation check leads into a first signal about the conditions from the experiment (discount promotion/free shipping, new/old customer) were not the best enough and/or the level of involvement was not the highest. Further this will be discussed in the limitations section of the thesis since it is an idea to develop more.

4.4. Preliminary validation analysis

4.4.1. Data cleaning
A step done before the methodology is to determine if all the answers should be taken into account despite failing the manipulation check. Considering that our dependent variable is continuous and it is aimed to compare the means between two distinct and independent groups, the ones who made it through the manipulations and the ones who

didn't, an independent samples t-test is conducted. The null hypothesis formulated is: "*there are no significant differences in the mean Purchase Intention between participants who passed the manipulation checks and those who failed.*".

After comparing the means of purchase intentions of the group that failed the manipulation checks (35 respondents) and the group that passed the manipulation checks (125 respondents), the p-value was less than 0.05 at a confidence level of 95 percent. The conclusion of it is that the null hypothesis is reject and the means are significantly different from each other. A consequence of this is that the people who responded incorrectly the manipulation checks will be removed from the dataset and therefore not part of the analysis. (see anal

After doing it, the following chart shows how many respondents will be per scenario and will be analyzed.

Table 2: Number of respondents per scenario and passed the manipulation checks

Scenario	N° respondents
New customer and free shipping	30
New customer and percentage discount	31
Old customer and free shipping	31
Old customer and percentage discount	33

4.4.2. Randomization check
A measure taken in order to guarantee the uniformity of the results between the four different conditions is to apply a chi-square test. In order to apply it, the control variables (gender, age and education) and a computed variable that took the values from 1 till 4, which each indicate one scenario, were considered. The results of the test revealed whether the four conditions are significantly different based on age, gender or education level. The P-values for each of the tests are non-significant, demonstrating that the groups were successfully randomized. Age, gender, and level of education are not significantly different across situations, according to this sufficient evidence. Thus, successful randomization between several situations has been achieved. The result can be seen on table A.4., A.5 and A.6. of the appendix 4

4.4.3. Methodology: ANOVA and regression analysis

For selecting the best statistic tool to analyze the information, first it is necessary to take into account that the independent variable and moderator are categorical variable and the dependent variable is continuous. The first one is to apply an ANOVA analysis, as stated by Malhotra et al. (2017), this test allow to compare the mean of two or more groups with a null hypothesis that states that all the means are equal. Within the designed hypothesis, two of them can be tested and those are hypothesis 1a and 1b. By doing it, hypothesis 1 can be tested to see whether there is a difference between discount promotion and free shipping in terms of purchase intention. In the case for the hypothesis 2 and 3, the moderating effect of loyalty expressed as new or old customer, can be studied with an ANOVA anlysis too. Regarding the control variables (age, gender and education level), the test which allows to analyze and that suits the best for this study is a regression analysis. For this type of test, it was developed two formulas.

In the case for the hypothesis 1a and 1b, which is the main effect of promotion type on purchase intention, "Purchase intention" is the dependent variable and "Monetary promotion" the independent one. As mentioned before, "Age", "Gender" and "Education level" will work as control variables. Since all of this will be categorical, except for the dependent variable, they will be receiving the values of 1 or 0. For example, in the case of Monetary Promotion: when a respondent received a scenario where a percentage discount was given, it will be 1 while if it was a free shipping, 0. In order to avoid the multicollinearity, there will be one option per variable that will be considered as the benchmark. For "Monetary promotion" is going to be free shipping but for the control variables, the scenario will change slightly. For "Age" and "Education level" there was one possible answer for each of them that any of the respondents selected. These were "40 or older" for "Age" and "Doctoral degree" for "Education level". Therefore on the formula only will be three out of those five options given since the ones mentioned before won't be taken into consideration. The treatment for "Gender" is different since after the data cleaning respondents only selected either "Male" or "Female". The benchmark chosen for this one will "Female", for "Age", "30 to 39" and for "Education Level", "Master degree". Lastly, the formula for testing hypothesis 1 will be as shown next:

$$PurchaseIntention_i$$
$$= \beta_0 + \beta_1 DiscountPromotion + \beta_2 Male + \beta_3 18oryounger$$
$$+ \beta_4 19to29 + \beta_5 PrimarySchool + \beta_6 HighSchool$$
$$+ \beta_7 BachelorDegree$$

About the moderating effect, this takes place in the hypothesis 2 and 3. Since it is a categorical variable, it will have the same treatment as applied before. The value of 1 will be applied to the participants that were assigned as new customers and 0, old customers. What it is aimed is to test the effect of loyalty on the relationship between monetary promotion type and purchase intention, in that way the interaction term "DiscountPromotion * New" is added to the formula. In this scenarios, the chosen benchmarks are: free shipping, old customer, female, 30 to 30 and master degree.

$$PurchaseIntention_i$$
$$= \beta_0 + \beta_1 DiscountPromotion + \beta_2 NewCustomer$$
$$+ \beta_3 DiscountPromotion * New + \beta_3 Male + \beta_4 18oryounger$$
$$+ \beta_5 19to29 + \beta_6 PrimarySchool + \beta_7 HighSchool$$
$$+ \beta_8 BachelorDegree$$

5. Results

5.1. Main effect monetary promotion type on purchase intention

Since it is aimed to apply test the hypotheses with an ANOVA analysis, first of all it is needed to determine if the assumptions of this test are met. Within the ones exist, Malhotra et al. (2017) emphasize on three of them: a random sample which is drawn from the population, a normally distributed dependent variable and equal variances of the dependent variable for each group. This are going to be taken into account to validate.

Regarding the first assumption, this is fulfilled within the experiment design. As section 4 states, the respondents were randomly assigned to one out of the four scenarios. As a result, the observations are independent from each other. For that reason, this assumption is believed to be met. Secondly, in order to analyze this assumption, a Kolmogrov-Smirnov test of Normality is applied in SPSS. The null hypothesis formulated of normal distribution in the dependent variable can be rejected after seeing the results of the test because $D(125)=0.265$ $p<0.001$. The interpretation of this is that the dependent variable is not normally distributed. Due this, this study will be incurring in a violation of the ANOVA's test assumption, therefore the results of this test have to be quite careful examined on their validity and reliability. Therefore, it is going to be applied a one-way ANOVA and a Kruskal-Wallis test, a parametric and non-parametric test respectively, to compared the results. Thirdly, about the third assumption of equal variances on the dependent variable for each group is implemented a Levene's test for homogeneity of the variances. The test was performed using multiple methods, including mean, median, median with adjusted degree of freedom, and trimmed mean. The results indicated that the assumption of equal variances was met for median, median with adjusted df and trimmed mean with a p-value greater than 0.05. However, when using the mean as the basis for the test, a significant violation of the assumption was observed (p=0.029). Therefore, it is important to note that it can be said that partially this last assumption was met but not fully.

The results of the one-way ANOVA test with monetary promotion type as independent variable and purchase intention as dependent variable are shown in table 3. Despite there is a difference on the means for discount promotion and free shipping, they are close to

each other. This can be interpreted as the main effect of the monetary promotion type on purchase intention is not likely. The null hypothesis of equal means can't be rejected at a confidence interval of 95 percent ($F(1,123) = 2.140$, $p > 0.05$), based on the results of the one-way ANOVA test. In other words, there is not enough evidence to conclude that the monetary promotion type (% discount or free shipping) has a significant influence on the purchase intention. Therefore, H1a and H1B are rejected based on the one-way ANOVA test.

Table 3: Results one-way ANOVA test

	N	Mean	F value	Df 1	Df 2	Significance F value
% Discount	64	4.75	2.140	1	123	0.146*
Free Shipping	61	4.36				
Total	125	4.56				

* two sided, $p > 0.05$

Followed by the ANOVA test, a non-parametric one is implemented to account for the non-normal distribution of the dependent variable. In table 4 are shown the results of the Kruskal-Wallis. With a null hypothesis of equal central tendencies of both groups, this test indicate that it can't be rejected. The meaning goes according to the one-way ANOVA test, there is not enough evidence to suggest systematic differences occur among monetary promotion type ($H(1)=1.820$, , $p > 0.05$).

Table 4: Results Kruskal-Wallis test

	N	Kruskal-Wallis H	Df 1	Asymp. Significance
% Discount	64	1.820	1	0.177
Free Shipping	61			
Total	125			

In terms of the control variables, the regression analysis is performed. The assumptions taken are the following: (1) the error terms are uncorrelated (multicollinearity), (2) linearity is present and (3) the error terms are normally distributed (Malhotra et al., 2017). For the first one, it is possible to check this with the the Variation Inflation Factor (VIF). On table A.7. Appendix 5 is possible to see the results, the fact that all of the VIF-values are less than 10.00 indicates that the last assumption is true and multicollinearity is less likely to arise in the data set (Curto & Pinto, 2011). In order to check the third and fourth

one, a normal Probability-Probability (P-P) is applied. Figure A.8. on Appendix 5 its shown that the dots are following the linear line. As result, this previous mentioned are satisfied.

Table 5 shows the regression output of two models: the first model consists on the independent variable and the second, the control variables are added. The coefficients are given between braces. Something to mention is that on the analysis for the Model 2, SPSS excluded a variable which was for "Age" for those who selected "18 years or younger". In the next paragraphs the results will be presented.

In Model 1, the analysis started by looking at how monetary promotion, the independent variable, affected Purchase Intention. The findings showed that the type of monetary promotion only adequately explained 1.7 percent of the variance in Purchase Intention, with an R-squared value of 0.017. The coefficient for the independent variable was 0.389, and this connection remained non-significant ($p > 0.05$). Notably, as shown by the F-statistic of 2.140 ($p = 0.146$), the total model (including the constant) considerably contributed to explaining the variance in Purchase Intention. The precise impact of the type of monetary promotion was, however, still unclear.

The same independent variable was added to the study in Model 2 along with additional control variables. These combined factors together explained 9.3% of the variability in Purchase Intention, according to the comprehensive model's improved R-squared value of 0.093. Notably, the type of monetary promotion retained a non-significant effect ($p = 0.062$) with a coefficient of 0.506 after the addition of these control variables, indicating that the predictive potential of promotion type was not considerably improved.

Within Model 2, certain control variables exhibited noteworthy effects. Specifically, "Male" and "Bachelor" showed significant, negative relationships ($p < 0.05$) with Purchase Intention. The statistical analysis demonstrated that type of promotion alone had a limited impact on Purchase Intention. However, when coupled with control variables, a modest improvement in predictive power was observed, shedding light on the role of gender preferences and educational backgrounds.

	Model 1	Model 2
% Discount	0.146	0.062
	(0.389)	(0.506)
Gender		
Male		0.015
		(-0.675)
Age		
19 to 29		0.862
		(0.081)
Education level		
Primary		0.227
		(1.874)
High School		0.603
		(0.242)
Bachelor		0.189
		(-0.374)
Intercept	4.361	4.801
N	120	120
R square	0.017	0.093

The results can be interpreted in the following way: when comparing individuals who identify as male to those who identify as female and holding all other variables constant, ceteris paribus, the Purchase Intention is estimated to be approximately 0.675 units lower for males. Percentage discount promotions seem to have a positive impact on purchase intention in comparison to free shipping. Nevertheless, the coefficient is non-significant ($p > 0.05$). In other words, just like it what was seen on the one-way ANOVA test and the Kruskal-Wallis test, the null hypothesis of no effect cannot be rejected. Hypotheses H1a and H1B cannot be rejected since there is not enough evidence. These results differ from the literature review as presented in section 2 and will be discussed in more detail in section 6.

5.2.   Interaction effect between monetary promotion type and customer loyalty

As stated on section 4, to test the hypothesis 2a and 2b, interaction between discount percentage promotion and customer loyalty, and hypothesis 3a and 3b, interaction between free shipping and customer loyalty, two tests are performed. As the matter of fact of the addition from an extra variable, a two-way ANOVA test is implemented, instead of a one-way ANOVA, and a linear regression. Table 6 presents an overview of the mean purchase intention per scenario. Taking it in consideration, old customer seem to have a slightly higher mean purchase intention in comparison to the new ones. To test wheter this observation is correct, a two-way ANOVA test is performed.

Table 6: Descriptive statistics four scenarios

Scenario	N	Mean	Std. Deviation
Old customer / % discount	33	4.97	1.27
New customer / % discount	31	4.52	1.50
Old customer / free shipping	31	4.42	1.73
New customer / free shipping	30	4.30	1.42
Total	125	4.56	1.49

The results of the two-way ANOVA test can be seen on Table 7 and the output will be described next. About the R squared, the test provides a value of 0.006 which is very low. This gives a first suggestion that the factors and interactions in the model explain only a small amount of the variance in the dependent variable. Additionally, it is possible to see that both main effects (Percentage discount and New Customer) and the interaction effect (DiscountPromotion*NewCustomer) are non-significant ($p > 0.05$). This is interpretated as there is no significant effect from customer loyalty, expressed as new or old customer, on the relationship between monetary promotion type and the purchase intention. Since there is no strong evidence to show the influence, it is not possible to reject the null hypothesis of no effect.

	Type II Sum of Squares	Df	Mean Square	F	Significance F value
Corrected Model	8.240*	3	2.747	1.238	0.299
Intercept	2599.20	1	2599.200	1171.072	< 0.001
% Discount	4.682	1	4.682	2.109	0.149
New Customer	2.634	1	2.634	1.187	0.278
%Disc*NewCust	0.872	1	0.862	0.393	0.532
Error	268.560	121	2.220		
Total	2876	125			

* R Squared = 0.030 (Adjusted R Squared = 0.006)

In first instance, the two-way ANOVA has shown no significant result. Therefore, a second test is performed: linear regression analysis with the purpose of comparing the results with the previous one done. On Table 7 it is presented the results from two model. The first one is just the moderation and main effects, while the second the control variables are added too. The coefficients are given between braces and SPSS excluded a variable which was for "Age" for those who selected "18 years or younger".

The purpose of the regression analysis in Model 1 was to identify the variables affecting Purchase Intention. With an R-squared value of only 0.030, the data show that the model has limited explanatory power. Thus, just 3% of the variance in Purchase Intention is explained by the predictors Interaction DiscountPromotion*NewCustomer, Percentage Discount, and New Customer taken together. At 0.06, the adjusted R-squared value is still quite low. With a p-value of 0.299 for the model, it is noticeable the lack of statistical significance. Additionally, because all of the individual predictors' p-values are higher than the usual cutoff of 0.05, none of them (% Discount, New Customer, and Interaction DiscountPromotion*NewCustomer) are statistically significant. These results imply that the variables in Model 1 combined do not significantly affect Purchase Intention.

With an R-squared value of 0.108, Model 2 has an improvement over Model 1, and it demonstrates that the added predictors collectively explain 10.8% of the variance in Purchase Intention. At 0.047, the Adjusted R-squared score is likewise somewhat higher. Although the entire model outperforms Model 1, its p-value is still above 0.05 (p = 0.092), indicating that it is not statistically significant. "Percentage Discount" is the only predictor in Model 2 to show statistical significance (p = 0.041). However, "Male" is negatively skewed (p = 0.016) and statistically significant. The remaining predictors in the model do not exhibit statistical significance.

Table 8: Results regression analysis model 1 and 2

	Model 1	Model 2
% Discount	0.142 (0.550)	0.041 (0.781)
New Customer	0.755 (-0.119)	0.897 (0.050)
Interaction %Disc*NewCust	0.532 (-0.334)	0.293 (-0.563)
Gender		
Male		0.016 (-0.668)
Age		
19 to 29		0.732 (0.161)
Education level		
Primary		0.215 (1.984)
High School		0.596 (0.247)
Bachelor		0.147 (-0.415)
Intercept	4.419	4.720
N	120	120
R square	0.030	0.108

Moreover, the interpretation to give can be the following. When a participant is male, his purchase intention is 0.668 units lower compared to being female, ceteris paribus. Also when percentage discount increase in one unit, purchase intention increases by 0.781 (ceteris paribus). After running both tests, it is possible to see that they have shown no significant interaction effect. Thus, hypothesis 2a, 2b, 3a and 3b cannot be rejected. The influence of customer loyalty on the relationship between monetary promotion type and purchase intention cannot be concluded due lack of evidence. These results differ from the literature review as presented in section 2 and 3, and will be discussed further in section 6.

6. Conclusions and recommendations

6.1. Conclusion

The introduction of this research indicates about how important the online retargeting is becoming, how the online shopping card abandonment is increasing and also how the figures of revenue source can change in terms of customer retention where is most likely that a current client is most likely to purchase compared to a new one. As a result, companies can nowadays retarget to the customers who do not concrete their purchase with different strategies, one involves to offer a benefit as an incentive. With this study, it is aimed to provide a better understanding of the influence from email retargeting to an abandoned cart with a promotion and to analyze if, by distinguish within a new or old customer, it can be increase the odds of concreting the transaction by a change on the purchase intention. The goal of this research is to give a concrete strategy according to the type of customer loyalty, expressed by either a new or existent customer.

The first approach that it is given on this study is to check the effectiveness of email retargeting abandoned shopping carts by offering a percentage discount promotion or a free shipping. On section 2 and 3, the literature study suggested that percentage discount can be more effective. As stated by and proven by Naurainum and Syamsuri (2022), a discount has a positive and significant impact on the purchase intention whereas a shipping offer will have a negative and insignificant. On further detail, Gonzalez et al. (2014) was able to identify that a percentage off discount is more effective than an amount off discount for an item with a price of less than $100.

Nevertheless, as shown in section 5, the results show that the purchase intention of the percentage discount and free shipping promotion are not statistically significant at a 95 percent confidence interval. The implication of this is that there is not enough evidence to conclude that the discount and free shipping differ from each other in terms of purchase intention. Thus, hypothesis 1a and 1b, which stated that there would be a difference between the two types of promotion, can be rejected.

A possible explanation of the difference on the findings between the literature and the empirical study, might relay in the fact that promotions on the context of retargeting are

quite small. The hypothesis were formulated based on literature that combined the promotion effectiveness and purchase intention in a stage where the consumers are either targeted or in an exploratory phase (Naurainum and Syamsuri, 2022; Gonzalez et al., 2014; Chen et al., 1998). Additionally, another aspect into consideration is the value aspect. As stated by different authors, the effectiveness from a free shipping or discount off relies on the benefit provided in terms of non or economic value (Boone et al. 2013; Yadav et al., 1993). Even though there was no possible to determine a negative relationship, the means on the different groups of the experiment were not the highest but either the lowest. This goes along partially with what Mark et al. (2023) found since they found a negative relationship between purchase intention and if retargeting is combined with email and other digital marketing techniques

The second approach taken was the moderating role of customer loyalty. The literature reviewed suggested that after using a labeling hypothesis, it was shown that new customers react positively to moderate initials discount within 5% to 35% off (Rio Olivares et al., 2018). Nevertheless, Lewis (2006[2]) expressed that percentage discounts were more effective within existent clients in a retargeting context. Lastly, continuing with the suggestion of Brand and Raush (2022), free shipping might have a bigger impact in previous customers since it tends to be an internal conflict whenever someone is shopping.

The results from the empirical study show that the difference in means between new and old customer is non-significant. Also the interaction variable (% Discount*NewCustomer) is non-significant. In conclusion, it is possible to formulate the statement that there is not enough evidence to conclude that customer loyalty moderates the relationship between monetary promotion type and purchase intention. Therefore, the designed hypothesis for percentage discount (2a and 2b) and for free shipping (3a and 3b) that claim the existence of an interaction effect, can be rejected.

A potential reason for the lack of interaction effect can be betrayed from the analysis made by Lewis (2006[1]). On his study regarding shipment and it is impact on customer retention and acquisition, he was able to distinguish how the efficacy of "free shipping" compared to two other shipping structures. Nevertheless, the significance within the group of new customers and repeated buyers was not that big. This goes on relation with

hypothesis 3a and 3b. Additionally, it is possible to claim the following. According to the results of the linear regression study, the Purchase Intention is calculated to be roughly 0.668 units lower for men when compared to women, ceteris paribus, and all other factors are held constant. This goes along with the findings from Dittmar et al. (2004) since women are more likely than males to indicate a desire to make an online purchase, and this propensity may be affected by a change in motivational priorities and attitudes about traditional purchasing while making the switch to online shopping. Understanding the characteristics and preferences of new clients is crucial.

6.2.   Implication for managers

One of the key implications for managers from this study is the importance of strategically leveraging promotion strategies in retargeting efforts. According to the findings, both free shipping and percentage discount have their uses, but the circumstances in which they are used can affect how effective they are. For instance, despite what the p-value ($p > 0.05$) shows, the ANOVA analysis does not provide sufficient evidence to support the claim that the type of financial promotion (% discount or free shipping) significantly affects the purchase intention. For instance, despite what the p-value ($p > 0.05$) shows, the ANOVA analysis does not provide sufficient evidence to support the claim that the type of financial promotion (% discount or free shipping) significantly affects the purchase intention. Moreover, it was also thrown the analysis with a $p > 0.10$ and gave the same results as the described with $p > 0.05$.

However, the main implication that can be point out is that it does not matter the kind of promotion send to whom. Managers should take into account their budgets in order to design and send the cheapest offer they can afford to their customers. As a result, the company can design their email retargeting strategy align with their limitations, in case they have. This is in line with the suggest by Malthouse and Elsner (2006) about "labeling hypothesis" whenever it is desired to approach to a new customers, just that it can be generalize to whichever the customer loyalty level of the customer is. Further insights reveal that discount promotions tend to work better for new customers, with an estimated 0.781 increase in purchase intention for each unit increase in percentage discount (ceteris paribus), whereas free shipping promotions might be more effective for retaining the loyalty of existing customers. Managers should carefully consider the customer segment

they are targeting and tailor their retargeting campaigns accordingly. As stated by Mark et al. (2023), at retargeting it is important not only to consider the channel but also other aspects whenever a condition is. This implies that a one-size-fits-all strategy for promotions might not produce the best outcomes.

Optimizing CRM strategies also becomes a crucial element in the world of retargeting. The study highlights the significance of customizing promotions to distinct consumer categories, but it also highlights the necessity for managers to hone their CRM strategies. Implementing automated CRM solutions that divide clients into groups according to their actions and past purchases might be extremely useful. These tools can assist in locating potential cart abandoners and prompt effective remarketing campaigns. As addressed by Ang and Buttle (2006), is crucial an allocation of the budget on customer acquisition which involves promotional retargeting strategies since nowadays many companies are failing on this.

6.3.   Limitations and suggestions for further research

Several limitations are tied to the results of the study conducted which give a starting point for future research. Firstly, an important limitation is the non-representativeness of the sample. On section 4 is mentioned that the respondents were collected by non-random sampling. Most of the respondents were in the age group of 20 to 29 and with an education level of either bachelor or master degree, which is not totally representative. Due the nonrandom sample, to give general conclusions it is difficult.

Secondly, the experiment design is another big limitation. As stated on section 4, the email retargeting template follows the structure from a retail company. Nevertheless this is not generalizable since each company is free to make changes according to what they see it performs better for them. About the product, it was taken into account the most neutral possible since it was aimed to give most of the attention to the promotion. As past studies mentioned, the product on consideration can have a huge impact of the effectiveness of a promotion (Chen et al., 1998; McKechnie et al., 2012).

Lastly, the type of promotion studied. In section 2 it is mentioned the reason why it has been analyzed monetary promotions only. Nevertheless, the results seems to give a non-

significant effect on purchase intention. As a result, a further topic to research on is how a non-monetary promotion might influence on it. Moreover, to measure the impact of other monetary promotions can be considered too such as Buy One Get One (BOGO), amount off discount, Buy now and get X discount on you next purchase, etc. By taking into account this and the previous paragraph, the possibilities of new experiments are quite wide since the combinations end up depending on the type of product and promotion.

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Appendix 1: Experiment questionnaire

Consent form

Dear participant,

Thank you very much for participating in this experiment, which is being conducted as part of a master's thesis at the Erasmus University Rotterdam related to marketing promotions for retargeting online abandoned shopping carts.

During this experiment, you will be presented with a scenario, after which related questions will be asked. This survey will take approximately 3 minutes to complete.

RISKS: No significant risk is associated with this online study.
ELIGIBILITY: Individuals 18 years or older are eligible to participate in this study.
CONFIDENTIALITY: All responses are kept anonymous and can be withdrawn at any time. Responses will be used strictly for this thesis research and no identifying information will be used in reports or presentations about the findings of this research.

Participation in this study is voluntary, and you may stop participating at any time by closing the browser window. Please note that partial data will not be analyzed. If you have any questions about this study, do not hesitate to contact me at 648396jz@eur.nl. If you have any questions at a later stage, desire additional information or wish to withdraw your consent, please get in touch with me as well.

Thank you for your valuable contribution to this study.

Kind regards,
Jaime Zuñiga

By giving your consent, you acknowledge that you have read the statement above and agree to participate in the study.

- I consent (1). *If this option was selected, the participant is randomly assigned to one out of the four scenarios.*
- I do not consent (2). *If this option was selected, the questionnaire ended.*

Scenario 1: Old Customer and percentage discount

Imagine that **you have ALREADY purchased before in this website** and you left abandoned your shopping cart with an item on it. Some hours later, you receive this email:
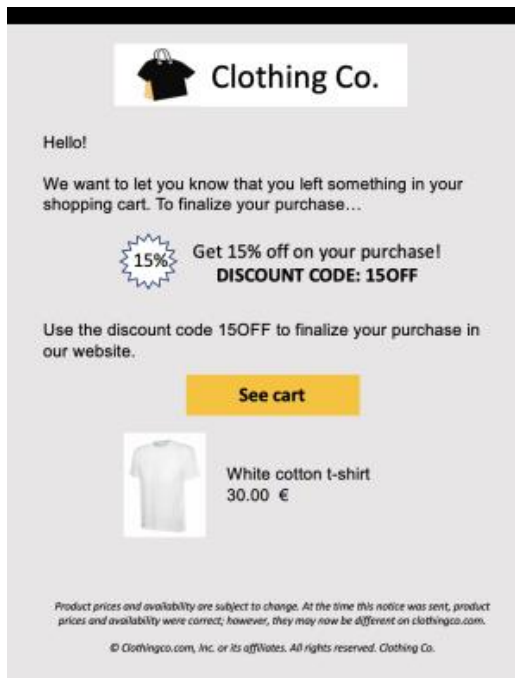
Please select an option for "The likehood that I would purchase this T-shirt is:"
- Extremely unlikely
- Moderately unlikely
- Slightly unlikely
- Neither likely nor unlikely
- Slightly likely
- Moderately likely
- Extremely likely

Scenario 2: New Customer and percentage discount

Imagine that **you have NEVER purchased before in this website** and you left abandoned your shopping cart with an item on it. Some hours later, you receive this email:
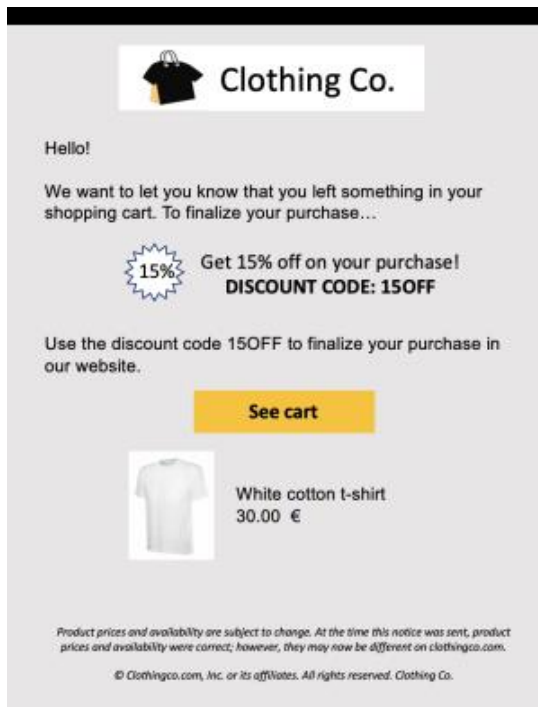

Please select an option for "The likehood that I would purchase this T-shirt is:"

- Extremely unlikely
- Moderately unlikely
- Slightly unlikely
- Neither likely nor unlikely
- Slightly likely
- Moderately likely
- Extremely likely

Scenario 3: Old Customer and free shipping

Imagine that **you have ALREADY purchased before in this website** and you left abandoned your shopping cart with an item on it. Some hours later, you receive this email:

Please select an option for "The likehood that I would purchase this T-shirt is:"
- Extremely unlikely
- Moderately unlikely
- Slightly unlikely
- Neither likely nor unlikely
- Slightly likely
- Moderately likely
- Extremely likely

Scenario 4: New Customer and free shipping

Imagine that **you have NEVER purchased before in this website** and you left abandoned your shopping cart with an item on it. Some hours later, you receive this email:
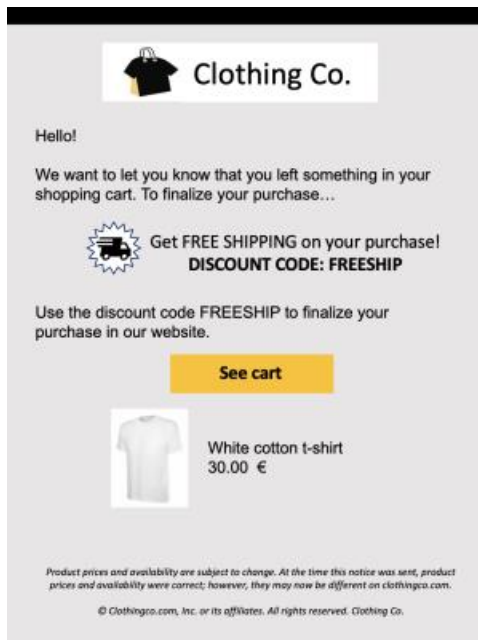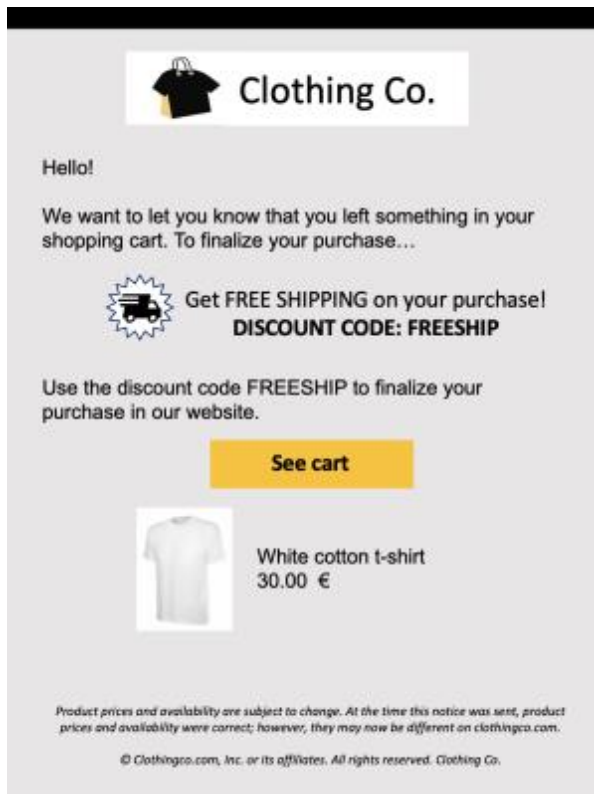

Please select an option for "The likehood that I would purchase this T-shirt is:"

- Extremely unlikely

- Moderately unlikely

- Slightly unlikely

- Neither likely nor unlikely

- Slightly likely

- Moderately likely

- Extremely likely

Manipulation Check

What kind of discount did you receive in the previous question?

- Free shipping
- 15% off

What kind of client you were assigned in the previous question?

- Someone who has NEVER purchased before in the website
- Someone who has ALREADY purchased before in the website

Control Variables

Please indicate your gender

- Male
- Female
- Prefer not to say

Please indicate your age

- 18 or younger
- 19 to 29
- 30 to 39
- 40 or older

What is the highest level of education you have completed?

- Primary school
- High school
- Bachelor degree
- Master degree
- Doctoral degree

End of survey

Appendix 3: Descriptive statistics

Table A.1: Descriptive statistics age of participants

Age	Frequency	Percent	Cumulative Percent
18 or younger	2	1.3	1.3
19 to 29	146	91.3	92.5
30 to 39	12	7.5	100
40 or more	0	0	100
Total	160	100	100

Table A.2: Descriptive statistics gender of participants

Gender	Frequency	Percent	Cumulative Percent
Male	100	62.5	62.5
Female	59	36.9	99.4
Prefer not to say	1	0.6	100
Total	160	100	100

Table A.3: Descriptive statistics study degree of participants

Education level	Frequency	Percent	Cumulative Percent
Primary school	1	0.6	0.6
High school	17	10.6	11.3
Bachelor degree	87	54.4	65.6
Master degree	55	34.4	100
Doctoral degree	0	0	0
Total	160	100	100

Appendix 4: Randomization check

Table A.4: Chi-Square test for Gender

Crosstab

Count

		ChiSceFinal				Total
		1,00	2,00	3,00	4,00	
Gender	Male	22	22	15	18	77
	Female	11	9	16	12	48
Total		33	31	31	30	125

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	3,829[a]	3	,281
Likelihood Ratio	3,812	3	,282
Linear-by-Linear Association	1,208	1	,272
N of Valid Cases	125		

a. 0 cells (0,0%) have expected count less than 5. The minimum expected count is 11,52.

Table A.5: Chi-Square test for Age

Crosstab

Count

		ChiSceFinal				Total
		1,00	2,00	3,00	4,00	
Age	18 or younger	0	0	1	0	1
	19 to 29	28	29	29	27	113
	30 to 39	5	2	1	3	11
Total		33	31	31	30	125

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6,064[a]	6	,416
Likelihood Ratio	5,923	6	,432
Linear-by-Linear Association	,934	1	,334
N of Valid Cases	125		

a. 8 cells (66,7%) have expected count less than 5. The minimum expected count is ,24.

Table A.5: Chi-Square test for Education Level

Crosstab

Count

		ChiSceFinal				Total
		1,00	2,00	3,00	4,00	
Education	Primary school	0	0	1	0	1
	High school	4	5	3	1	13
	Bachelor degree	20	14	16	16	66
	Master degree	9	12	11	13	45
Total		33	31	31	30	125

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	7,506[a]	9	,585
Likelihood Ratio	7,675	9	,567
Linear-by-Linear Association	1,768	1	,184
N of Valid Cases	125		

a. 8 cells (50,0%) have expected count less than 5. The minimum expected count is ,24.

Appendix 5: Results

Table A.7.: Collineatiry Diagnostics – VIF

Model	Dimension	Eigenvalue	Condition Index	(Constant)	Reg	GPreferMale	A19to29
						Variance Proportions	
1	1	3,930	1,000	,00	,02	,02	,01
	2	1,015	1,968	,00	,00	,00	,00
	3	1,007	1,975	,00	,00	,00	,00
	4	,418	3,067	,00	,71	,02	,01
	5	,362	3,295	,00	,22	,59	,00
	6	,229	4,144	,04	,00	,33	,12
	7	,040	9,883	,95	,04	,04	,86

Figure A.8: Probability-Probability (P-P)