

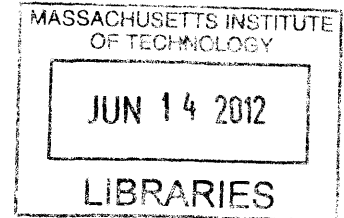
**Personalized Online Promotions:
Long-term Impacts on Customer Behavior**

By

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ARCHIVES

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Abstract

Personalization is widely used by marketers in today's world. It is not only a competitive advantage but is becoming a necessity for companies. Recent information technology advances have helped a lot to improve personalization methods. Companies could collect data about their customers through the Internet more easily and quickly. In return, companies create more values for their customers through personalization in performance as well as personalization in relationship. However, personalization may also bring new problems if customers are concerned about issues such as privacy, choice overload, and perceived fairness.

This thesis examines the advantages and disadvantages of personalization from both customers' and companies' perspectives. It also studies how customer reactions to personalization change over time, and suggests a conceptual framework that shows how customer behavior affects companies' profitability. It concludes with recommendations about how companies should act in order to have successful online personalization strategies.

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1. Introduction

Companies try to understand their customers' needs and provide them with product/service that matches with their needs and preferences. In order to know customer needs and wants, a company should collect information about its customer in different ways. Businesses moved from mass production to mass customization and have gone much further by personalizing each product/service as well as all other marketing activities. Moreover, this new trend enables companies to use pull marketing more easily compared to traditional push marketing methods. All these new trends could result in more value to both companies and customers. Companies may increase their profit and customers may receive better and value-added services.

Personalization in product/service, advertisement, pricing and promotion is not new, but it has gained popularity in recent years due to the advances in Internet-based technologies. Internet has created a platform that benefits both company and customer. Recent advances in information technology have helped companies to collect data more easily and quickly. In addition, through the Internet, companies could track customer behavior, understand their interests and provide them with personalized offers.

Personalization and customization are often used interchangeably. Although some scientists differentiate between these two terms, in this thesis we use them as similar words. Individualization is another word that has similar usage and meaning to personalization and customization. Individualization on the relationship level is typically modeled by the term One-to-One-Marketing (Peppers and Rogers 1997). Personalization is a term often used in connection

with the individualization of the communication with the customer using new Internet technology. Individualization on the performance level is typically modeled by the term Mass Customization. The concept of mass customization refers mainly to delivering physical products or core services according to each customer's wishes with near mass production efficiency (Piller & Schaller, 2002). The advent of Internet based technologies has enabled vendors of all product types to offer some degree of personalization in the online environment. While mass-customization focused on satisfying segments of customers from a production perspective (Pine II et al. 1995), personalization aims to satisfy needs of an individual. In the online medium, where customers are only a mouse click away from comparable offers, distinguishing characteristics are the only means to bind customers long term to one's own offer (Schubert & Koch, 2002). In the online context where personalization has become more a competitive necessity, the primary strategic benefit to vendors is the ability to acquire customer information in exchange for personalized service (Piller & Schaller, 2002). But there are some challenges related to this strategy. For example, customers might not be willing to provide their personal data to companies. Beside privacy concerns, there might be other issues related to personalization that would affect the use of personalized marketing activities. Previous studies examined benefits that personalization has for companies such as increased profit and improved Customer Relationship Management (CRM). There are also some researches that argued the privacy concerns of customers about providing their information to companies. However, there is yet no study, to our best knowledge, that encompasses advantages and disadvantages of online personalization from both company's and customer's perspective.

In this thesis we would like to examine advantages and disadvantages that online personalization has for both company and customer. Recently, companies are competing to use personalization more than ever. However, researches show that some disadvantages exist with this regard for either company or customer. Considering both positive and negative side of personalization, companies are still using this method and companies and customers seem happy practicing it. This means that companies and customers have found solutions for the issues, resulting in more benefits in personalization for both sides. In this thesis, we will also state those solutions. ***Chapter 2 -Pros and Cons of Personalization from Company's Perspective*** discusses both advantages and disadvantages of recent online personalization from company's perspective. Personalization brings more profit to the company and improves its CRM. Since the company is providing product/service or promotional offer that is matched with customer's preferences, it could charge a premium. However, it will be examined in this study that it is not always profitable to charge a customer for a higher price, especially if the company has forward-looking customers. In addition, the company should make a challenging decision about price-customization of its own customer or competitor's customer. With this regards, the company will gain different profits under different market conditions. This chapter discusses that considering all different factors mentioned, the company will have higher profit in long term by using personalization methods. Moreover, this chapter discusses that, through personalization, company will collect more information about customers that will improve its CRM. The negative aspects of personalization that will be discussed in this chapter is that personalization is costly and it will intensify competition and decrease differentiation between

firms. **Chapter 3 - Pros and Cons of Personalization from Customer's Perspective** discusses both advantages and disadvantages of personalization from customer's perspective. Personalization has three benefits for customers: First, customers receive higher deal value. Second, preference matching will be much easier for customer and it is sometimes done through recommending systems. Third, customers could have more personal expression and control over their choices. This chapter discusses negative aspects of personalization as well. First, privacy concern is the biggest issue related to personalization. It has always been an issue related to marketing activities when customers were worried that companies misuse their information. Second, choice overload creates issue for customers. They will be bombarded with so many relative choices through online interactions (advertising, promotional offers, etc.) with company, resulting in difficulty of making a choice. Third, perceived fairness is a matter of concern for customers. Customers compare personalized offers that they receive with those received by other customers of the company or competitor's company. Thus, they might have feelings of unfairness if they are in disadvantage. **Chapter 4 - Dynamics of Customer Behavior** discusses how customers react to company's practices of personalization considering all the positive and negative aspects of it mentioned in previous chapters. This chapter also presents a conceptual framework that shows how customer's behavior changes over time and how it affects firm profitability. **Chapter 5 - Conclusion** wraps up the thesis and recommends how companies should act in order to have successful online personalization strategies.

2. Pros and Cons of Personalization from Company's Perspective

2.1. Advantages for the Company

2.1.1. Customer Relationship Management (CRM)

Customer Relationship Management systems are enterprise information systems which support the relationship with the customer. They are used to communicate with the customer or to assist communication with the customer. CRM systems store all kinds of information about the customer ranging from basic information such as name and address to the full history of company-customer interaction (e.g. inquiries, purchase transactions, claims). The databases contained in CRM systems are a valuable information source, which can be harnessed for personalization. CRM aims at supplying every employee (or even the client himself e.g. in an e-shop) with the relevant information about a customer at the right time to be able to offer him an individualized service. For example, permission Marketing is the idea to give the customer the chance to select the kind of marketing message he or she wants to receive (Godin 1999). The customer grants a company the right to supply him with marketing information in a preferred category. For instance, regarding electronic communication it is a means to prevent spamming (Schubert & Koch, 2002).

There is a two-way relation between CRM and personalization. As mentioned above, CRM helps to improve personalization. In addition, when company uses personalized promotions and tracks customer behavior on the Internet platform, it could collect more individualized data that will eventually enrich its CRM. Thus, there is a loop between CRM and personalization. Improvement of each will positively affect the other.

According to Piller and Schaller (2002), collaborative CRM has to be based on the

individualization of the solutions offered to a customer as well as on the individualization of the marketing activities in order to build long lasting, persistent customer loyalty.

Apart from approaching customers individually and producing customer specific products, individual business relationships are increasingly becoming the center of attention in the discussion of a more closely customer orientated approach. Many writers are pleading for a marketing perspective which gives priority to the building up and maintenance of long term profitable relationships with promising customers, as opposed to the short-term success orientated approach of single transactions in anonymous mass markets (Grönroos 1989; Glazer 1999; Webster 1992). As a result of the technological developments over the last few years, the final realization of the principle of (individual) customer orientation, which has always been a part of the marketing philosophy, seems to be on the horizon. Individualization can be seen as a major driver of loyalty (Piller & Schaller, 2002). Often, individualization is only seen in the context of individualized customer relationships, or more specifically, personalized communication (relationship level). Piller and Scheller suggest that it is fundamental not to restrict the concept of individualization to relationships, but also to include the individualization of products or services (performance level), which are actually the customer's central interest and hopefully the central competence of the company.

On the Internet, we have experienced massive growth in systems that can personalize content delivered to individual users. The science behind personalization has undergone tremendous changes in recent years, yet the basic goal of personalization systems remains the same: to provide users with what

they want or need without requiring them to ask for it explicitly. Personalization is the provision to the individual of tailored products, services, information or information relating to products or service. It is a broad area, also covering recommender systems, customization and adaptive web sites. Three aspects of a web site affect its utility in providing the intended service to its users. These are the content provided on the web site, the layout of the individual pages and the structure of the entire web itself. The relevance of each of the objects comprising a web page to the user's need will clearly affect their level of satisfaction (Mulvenna, Anand, & Buchner, 2000).

Personalization technology involves software that learns patterns, habits, and preferences. On the Internet, its use is primarily in systems that support e-business. Personalization works in the context because it helps users to find solutions, but perhaps more importantly, it also empowers e-business providers with the ability to measure the quality of the solution. In terms of the fast emerging area of CRM, personalization enables e-business providers to implement strategies to lock in existing customers and to win new customers (Mulvenna, Anand, & Buchner, 2000). Therefore, online personalization helps to improve customer satisfaction as well as customer relationship. Its effect on CRM is both short-term and long-term. When a company personalizes the web site contents, direct marketing messages and promotions, customers feel more satisfied in short term. After changing from a potential customer to real customer, customers will receive more personalized promotions from the company, making them more satisfied and transferring them to loyal customers. Therefore, personalization plays an important role in CRM improvement in long term.

For example, Braynov (2003) states how location-based personalization

improves CRM. This type of personalization is mobile not online, but it should be noted due to its increasing usability and relation with online businesses. The information used for personalization may range from a history of past purchases and browsing behavior to explicitly provided user preferences. The rapid growth of wireless networks and mobile commerce provide new opportunities for personalization by offering more user-specific information such as geographic location, date, time, travel direction, etc. Hand-held devices, for example, allow customers to receive personalized content and recommendations on-the-move, at home, and at work. One of the most promising technologies is Location-Based Services (LBS) which allows business to identify a user's location and offer context-dependent services. LBS holds the potential to significantly improve CRM, wireless marketing, and emergency services. Location-based services allow content providers to offer personalized services based on customers' geographic position. Mobile users can receive local weather reports, news, travel reports, traffic information, maps, hotels, restaurant information, etc. For example, Go2 Systems (www.go2online.com) provides a mobile Yellow Pages directory based on users' location. The directory allows users to get directions to various nearby services such as entertainment, real estate, finance, recreation, government and travel (Braynov, 2003).

With the increasing popularity of E-commerce in recent years, web services that can provide better CRM for the company through electronic means are also gaining importance. Hua (2007) expresses that with the aid of data mining or targeted techniques, businesses can formulate specific customer-focused strategies more easily and scientifically and therefore be more satisfied with their CRM initiatives. Data mining technology can enhance the understanding of

different components of customer value as well as the needs and background of the customer. Different components of customer value provide opportunities for enhancement and management of the relationship with individual customers. Value is defined at the individual level. Therefore it is important to identify the components of value that are unique to each customer or customer base in order to create unique value propositions to that customer base and manage those relationships appropriately (Hua, 2007).

According to what discusses in this section, one could conclude that there is a virtuous cycle between CRM and personalization strategies. On the one hand, personalization could increase customer satisfaction and improve CRM. On the other hand, CRM could help companies to provide customers with more personalized products/services.

2.1.2. Profit

Many industries, including supermarkets, airlines, and credit cards, have compiled vast databases of individual consumer transactions and have used them to study purchase behavior and to make specific offers to individual consumers, via direct mail or other forms of targeted marketing. Many companies have become expert in using tracking tools to refine marketing strategies (Bailey 1998, Dayal et al. 2001). Because so many transactions are now computer mediated, and these computers can easily be networked to data centers, sellers now have the ability to access databases of past purchases in real time. This allows them to condition current offers to consumers on their previous purchase behavior. Sellers can offer each individual a different price, a particular prize or coupon, or personalized recommendations. With computer-mediated transactions, price discrimination on an individual basis becomes quite feasible (Acquisti & Varian, 2005) and helps companies increase their profit.

Collecting and analyzing such information is particularly easy in the online world. The HTTP protocol allows servers to set and read “cookies” that can store unique identifiers or information about a transaction. These cookies persist after the session has ended, so that the next time the user accesses the server (using the same account), the server can retrieve identification that can be matched with details of past interactions. Even without cookies, a variety of other mechanisms can be used to identify individual users, such as static Internet addresses, credit card numbers, and direct user authentication (Acquisti & Varian, 2005).

Although sellers can now easily use price-conditioning strategies, consumers are far from defenseless. No one is forced to join a loyalty program. It is relatively

easy to set one's browser to reject cookies or to erase them after a session is over. Consumers can use a variety of credit cards or more exotic anonymous payment technologies to make purchases anonymous or difficult to trace. In addition, consumers can voice their displeasure for pricing policies perceived as discriminatory or intrusive, as happened after the famous Amazon.com price experiment (Streifeld 2000). Thus, even though sellers can post prices, observe choices, and condition subsequent price offers on observed behavior, buyers are also able to hide the fact that they bought previously. Hence, it is likely that sellers will have to offer buyers some benefits to induce them to reveal their identities (Acquisti & Varian, 2005).

However, according to (Acquisti & Varian, 2005), there are conditions under which sellers will find it profitable to condition prices on purchase history. The main condition is that if the consumer's value for the good changes in certain ways as he or she makes more purchases, the seller will find it profitable to condition prices on past behavior. The study focuses on cases where the seller can induce the necessary change in consumer valuations by offering various forms of personalized enhanced services to prior purchasers, such as personalized discount coupons (common in supermarket loyalty clubs), lowered transactions costs (such as one-click shopping), or personalized services (such as personalized recommendations) (Acquisti & Varian, 2005).

The term "personalized enhanced service" is used to describe a service that is valued by a consumer but can be offered only if there is prior interaction between the consumer and the merchant. Typically, such an enhanced service is based on information about the consumer's preferences. A consumer might frequent the same barber because that barber knows the consumer's

preferences in haircuts. The barber, in turn, might charge a premium for his services because the consumer would have to incur costs in explaining to another barber exactly how his hair should be cut. The same story applies to many other personalized services. People might stick with the same doctors, lawyers, accountants, dentists, butchers, and so on because these professionals know the consumer's tastes. Conversely, these professionals can provide different levels of service to loyal customers than to occasional customers (Acquisti & Varian, 2005). Consequently, due to higher level of service and more personalized promotions, professionals could charge customers more and increase their profit. Similar thing happens in companies that use online personalized promotions and price-customization. They could charge customers higher and increase their profit because they are offering customers personalized products/services and help them save information search cost. The important point is that companies should decide to which customer they offer a higher price and to which customer they offer discount in order to increase their total profit. This concept will be explained later in this section.

When firms have information about consumers' previous purchases, they may be able to use this information to offer different prices and/or products to consumers with different purchase histories. This sort of "behavior-based price discrimination" (BBPD) and use of "customer recognition" occurs in several markets, such as long-distance telecommunications, mobile telephone service, magazine or newspaper subscriptions, banking services, credit cards, labor markets; it is becoming increasingly prevalent with improvements in information technologies and the spread of e-commerce and digital rights management (Fudenberg & Villas-Boas, 2005).

Syam and Kumar (2005) examine the profitability from a different perspective. They argue that firms can increase their profits by offering customized products in a competitive setting. This finding is counter to that from the price-customization literature, which finds that with symmetric firms, price customization intensifies competition and leads to a prisoner's dilemma. The main driver of their finding is that when firms compete only with standard products then serving the marginal consumers whose ideal point is sufficiently removed from the standard products requires firms to lower price, thus implicitly subsidizing the infra-marginal consumers. If the intensity of preference of the high cost segment is sufficiently large, the benefit of reducing price to serve the marginal consumers is less than the cost of subsidizing the infra-marginal consumers who are satisfied with the standard product. Under these conditions firms will set prices of the standard product so that some of the consumers in the high cost segment are not served. Product customization achieves two objectives. First, it allows firms to grow demand by serving customers that were not served with standard products. Second, it allows firms to extract the surplus from the infra-marginal consumers. This is accomplished by using customized products to target those consumers whose preferences are far removed from the standard products, and by using the standard products to target the fringes of consumers whose preferences are close to them. This allows firms to compete efficiently for consumers that are not satisfied with their standard offerings, without having to needlessly subsidize consumers that are. Under certain conditions, firms can increase the price of their standard products when they also offer customized products compared to the situation in which they do not (Syam & Kumar, 2005).

As mentioned before, a routinely used strategy is behavior-based pricing (BBP) such that firms offer different prices to different customers based on their past purchase behavior. However, firms differ in whether they offer a lower price to their own customers or competitors' customers. Catalog retailers for items such as apparel typically send special discount "value" catalogs to existing customers, whereas magazines and software firms often offer discounts to buyers of competing products in the form of lowered introductory prices (Shin & Sudhir, 2010).

O'Brien and Jones (1995, p. 76) suggested a different view. They epitomize the conventional wisdom of many practitioners: "to maximize loyalty and profitability, a company must give its best value to its best customers. As a result, they will then become even more loyal and profitable" (emphasis our own). Essentially, practitioners argue that firms rewarding their own customers leads to a virtuous cycle: the firm rewards its current customers with better value propositions, which makes it optimal for those customers to deepen their relationship with the firm, which ultimately increases firm profitability (Peppers and Rogers 2004). However, academic literature is skeptical of this conventional wisdom. In most existing models of BBP, the optimal choice is not to offer current customers a lower price. When the firm can price discriminate on the basis of consumers' past purchase behavior, it should charge higher prices to existing customers, who already have revealed their higher willingness to pay for the product (otherwise, they would not have purchased from it), relative to its competitor's customers. That is, customers' past purchases reveal their relative preference for each firm. Furthermore, if consumers recognize the possibility that they will be penalized in the future, they can alter their behavior to reduce

the ability of firms to infer their true preferences. Such strategic behavior by consumers and increased competition to poach others' customers may make BBP unprofitable. The overall lesson is that BBP cannot be profitable if both consumers and firms are rational and forward-looking; furthermore, it is never optimal to reward one's own customers (Shin & Sudhir, 2010).

Shin and Sudhir show that if there are two features in the market, it is profitable that a company uses BBP. First condition is that customer value be heterogeneous. It means not all customers are equally valuable to firms. Some purchase more than others or contribute more to a firm's profits. Widespread empirical support in various categories confirms the 80/20 rule—that is, the idea that a small proportion of customers contributes to most of the purchases and profit in a category (Schmittlein et al. 1993). Second condition is that consumers have stochastic preferences. Consumers' preferences can be stochastic. Consumer preference for a product may change across purchase occasions, independent of the marketing mix or pricing, because their needs or wants depend on the specific purchase situation, which changes over time (Wernerfelt 1994).

With these two features included, Shin and Sudhir identify conditions in which behavior-based pricing is profitable in a competitive market, even when firms and consumers are strategic and forward-looking; and firms should offer lower prices to their own best customers or to their competitor's customers. They find that either sufficiently high heterogeneity in customer value or stochasticity in preference is sufficient for BBP to increase firm profits. However, both sufficient heterogeneity in customer value and stochastic preference are required for firms to reward their own best customers; if both elements do not exist, they

should reward their competitor's customers (Shin & Sudhir, 2010).

All in all, companies should be aware how to translate personalization into profitability. If they reward their own customers, they may gain profit but it is not optimal. If they charge their customers higher than before due to access to customer data and their customers be forward-looking, they will lose profit. According to Shin and Sudhir companies could benefit from personalization if customers have heterogeneous value and stochastic preferences. Under such market condition, company should reward its own customers and increase its profits. Otherwise, it should reward its competitor's customers to have profitability.

2.2. Disadvantages for the Company

2.2.1. Operating Cost

It was previously mentioned that online personalization results in more profit for a company, especially in long term and under specific market conditions. But, it should be noted that providing personalized products/services and promotions to customers are costly. Online personalization causes some changes in the company or in customer's perspective that result in higher costs. These changes include more operational complexity, higher customer expectations and increased product or promotion variety.

In their desire to become customer driven, many companies have resorted to inventing new programs and procedures to meet every customer's request. But as customers and their needs grow increasingly diverse, such an approach has become a surefire way to add unnecessary cost and complexity to operations (Gilmore & Pine, 1997). Companies throughout the world have embraced mass customization in an attempt to avoid those pitfalls and provide unique value to their customers in an efficient manner. Readily available information technology and flexible work processes permit them to customize goods or services for individual customers in high volumes and at a relatively low cost. But many managers at these companies have discovered that mass customization, too, can produce unnecessary cost and complexity. They are realizing that they did not examine thoroughly enough what kind of customization their customers would value before they plunged ahead with this new strategy (Gilmore & Pine, 1997).

Customization cost effectiveness is the ability to produce highly differentiated products without increasing costs, significantly. To achieve customization while production costs and purchase price increase dramatically will not provide the

firm with a competitive advantage. For most consumers, price expectations are set by mass producers, which have steadily lowered production costs. As a result, consumers expect to receive customized products at close to mass-production prices. Mass customization requires organizations to build production process that achieve high flexibility and low cost, simultaneously (Lau, 1995; Pine, 1993) (Tu, Vonderembse, & Ragu-Nathan, 2001).

The pursuit of customer satisfaction can be costly if rising levels of performance lead to increased expectations and a lower level of satisfaction with the same standard of performance over time. Therefore, customer satisfaction may be a case of going backward while standing still. The primary causes may be that many customer satisfaction strategies are easily copied (e.g., frequent user programs) and efforts aimed at raising customer satisfaction lead to higher customer expectations. Fulfilling higher customer expectations may lead to higher expenditures. In addition, some customer satisfaction activities and productivity may be inherently incompatible (Anderson et al., 1997).

The strategy is to change customer expectations rather than attempt to affect customer satisfaction. The Internet is able to provide customers with more realistic expectations. The interactive and audio-visual nature of the Internet can be used to demonstrate the actual performance of a firm. There are already clubs and restaurants that broadcast scenes from their locations through webcams. Some firms like GE provide actual performance data on their web site. Therefore, it is anticipated that firms will increase expenditures on expectation management in the future (Sharma & Sheth, 2002).

Another factor that increases costs of personalization is product and promotions variety. Although most firms realize that increasing the number of final products

in a market offer increases complexity and costs in a supply chain, they have difficulties in measuring the amplitude. Mather's (2000) research affirms this statement since many firms overlook indirect costs such as those resulting from transactional costs. He also indicates that accounting practices do not provide proper feedback on product profitability, which becomes a greater problem as variety increases. Traditionally, firms have tried to avoid product variety but there is increasing pressure from competitors to provide this offer. Still, right from their offers, firms could reduce product variety by limiting the number of final product combinations. This is evident in the automobile industry where they do offer many options for several parameters on their automobiles but the customer could only order 'packages' of options. In this situation, the customer gets the impression that the firm offers many parameter options but since the packages are carefully made to address specific customer profiles, most customers are satisfied with the offer and the firm reduces final product variety. Product variety is the direct result of personalized offers and is a stem of complexity in key business processes (Poulin, Montreuil, & Martel, 2004).

Such situation is similar to what happens in online businesses. Since the products, advertisements and promotional offers are designed based on each customer's preferences, the customer feels that she has received enough alternatives although the company reduces the variety of offers. Sometimes, customers even feel overwhelmed by facing lots of choices. This issue, choice overload, will be addressed in the next chapter.

2.2.2. Competition

Personalization affects competition between firms in different ways. This concept has been studied from different perspectives and will be mentioned in the following.

The increasing ability to identify customers allows firms to offer different prices and products to customers with different past purchasing profiles. This “relationship marketing” has important dynamic effects. First, when attracting first-time customers, firm realizes that what they learn about these customers affect future profits. Second, firms realize that the number of first-time customers attracted by a certain firm also affects the willingness of future competitors to go after those same customers. Third, consumers realize that when they choose a product from a firm, the available set of future products or prices offered by that firm may change (Villas-Boas, 2003).

There have been several studies on competitive markets that have access to customer information and could customize price based on customer histories. Villas-Boas (1999) and Fudenberg and Tirole (2000) study the possibility of firms recognizing their previous customers in a competitive setting, where in equilibrium all consumers are served. They find that each firm attracts some of the consumers that in the previous period buy the product of the competitor. Fudenberg and Tirole perform their analysis in the context of a one-generation two-period model. Villas-Boas considers overlapping generations with infinitely lived firms and finds that in steady-state prices are constant. Nilssen (1992), Chen (1997), and Taylor (1998) consider the possibility of competitive firms recognizing their previous customers in the context of switching costs, which brings additional dynamic effects into the analysis (Villas-Boas, 2003).

Syam and Kumar (2005) state that customization benefits firms by expanding demand and by allowing them to mitigate the intensity of competition between standard products. Dewan, Jing and Seidmann (2003) find that the standard good prices remain the same independent of firms' decision to offer customized products. In contrast, Syam and Kumar (2005) find that the price of the standard good may be higher or lower when firms decide to offer customized products relative to the case when there are no customized offerings. Surprisingly, when firms offer customized products they can increase the prices of their standard products (relative to when they do not). They also contribute to the growing literature on customizing the marketing mix. There is a rich literature in marketing and economics (Shaffer and Zhang 1995, Bester and Petrakis 1996, Fudenberg and Tirole 2000, Chen and Iyer 2002, Villas-Boas 2003), which examines the effect of customizing prices to individual customers. In general the finding is that customized pricing among symmetric firms tends to intensify competition as a firm's promotional efforts are simply neutralized by its rival. They contribute to this body of work by examining the effect of offering customized products under competition. They find that, unlike what mentioned in price-customization literature, when symmetric firms offer customized products it does not lead to a prisoners' dilemma, even though it could intensify price competition (Syam & Kumar, 2005).

Zhang (2011) argues that personalization hurts competing firms' profits by decreasing differentiation. There are two perils related to behavior-based personalization. First, although purchase histories reveal consumer preferences, competitive exploitation of such information damages differentiation, similar to the classic finding that behavior-based price discrimination intensifies price

competition. Second peril happens when forward-looking firms try to avoid the first peril by suppressing the information value of purchase histories. One way is to have a market leader serves all consumers on day 1. In this case, purchase histories contain no information about consumer preferences. However, knowing that their rivals are willing to accommodate a market leader, firms are more likely to offer a mainstream design at day 1, which jeopardizes differentiation (Zhang, 2011).

However, firms can reduce the perils of behavior-based personalization under specific market conditions. If consumers are able to self-select among all personalized designs, firms will abandon personalization altogether to avoid intra-firm cannibalization. Alternatively, if firms are committed to providing a “classic design” for their old customers, it will help mitigate both perils. Finally, asymmetric patience between firms attenuates the first peril, whereas a larger segment of forward-looking consumers reduces the second peril (Zhang, 2011).

It could be concluded that personalization could have negative effects on (intensifies) competition and reduce differentiation. According to Zhang (2011) consumer self-selection and provision of classic design by the company help reduce perils of low differentiation caused by personalization.

3. Pros and Cons of Personalization from Customer's Perspective

3.1. Advantages for the Customer

3.1.1. Deal Value

The customization of a promotion offer can be viewed as a restriction increasing the perception of exclusivity and deal value for the promotion recipient. When consumers react to marketing offers with the goal of maximizing personal welfare (i.e., they are self regarding), the receipt of an exclusive deal leads to advantageous inequity that enhances evaluations of the targeted discount among deal recipients (Loewenstein, Thompson, and Bazerman 1989). Further, active participation of customers in specifying their preferences is expected to make the fit between the offer and customers' preferences more transparent and lead to higher offer attractiveness. Hence, perceived deal value of customized promotions will be higher than that of universal promotion (Chatterjee & McGinnis, 2010).

The advent of information technology has hastened the demise of an undifferentiated approach to marketing. New information-intensive approaches, reflected in such catchphrases as "mass customization," "segments of size one," and "micromarketing," treat each consumer as a market unto himself or herself, in which promotions, advertising messages, and even products are tailored to individual tastes. Indeed, now that access to individual customers and their purchase histories is facilitated by the Internet, it is likely that the targeted promotion practice will proliferate. In adopting the standard economic theory of consumer choice, prior research on targeted promotions has tacitly assumed that the choice of products or firms is dependent only on the prices consumers can

avail of and so may neglect to account for perceptions of unfairness (Feinberg, Krishna, & Zhang, 2002).

Research by Feinberg, Krishna, and Zhang (2002) provides evidence of a betrayal effect whereby loyal consumers of a brand provide less favorable preferences for that brand when they were excluded from a targeted deal offered only to competitors' customers. Equity frameworks presume that individuals will engage in inter-personal comparisons that factor not only the outcomes one receives (non-social utility) but also how such outcomes compare to those accrued by others (social utility) (Bolton and Ockenfels 2000).

Prior research on targeted promotions has typically adopted a tenet of the standard economic theory of "rational" consumer choice: What a consumer chooses depends exclusively on the prices offered to that consumer, not on prices available to others. However, different examples such as Amazon, suggest that a consumer may be aware of prices that are available to others for the identical product and this knowledge may influence his or her purchase decision (Feinberg, Krishna, & Zhang, 2002). Therefore, it is concluded that consumers perceive a better deal value when they receive targeted promotions, not due to the better price of the deal but because they receive more dollars off compared to other customers.

Moreover, online personalization could increase deal value for customers by helping them to find a desired product, service or information in a shorter time. Previously, customers had to spend a lot of time in order to find a specific product/service. They had to be so lucky to receive a special promotional offer at the same time they required it. Most of the times they could not find those offers at the right time or when they received those promotions, they had already done

the purchase. But, by the help of personalized online promotions, special offers are always available to customers. More importantly, these promotions are based on customers' previous purchases, website visits or clickstream data. In this way, every thing that a customer sees on the website or receives as an email or promotional offer is customized to her interest. Therefore, she does not have to spend so much time in order to find what she is looking for. In most cases, related data is provided to her even before she thinks of searching for a product/service. This means that she will save a significant amount of time due to personalization. When she purchases a product/service in a very short time, the perceived deal value will increase for her. Consequently, she will have more satisfaction because she could have a desired product/service in a very short time.

3.1.2. Preference Matching

Personalization is very close to the concept of mass customization, but it is more related to the way the company customizes its communication with customer, while mass customization is related to the customization of the product/service. At the core of mass customization is the principle that customers want products and services as unique as their individual tastes and preferences, at prices that translate into superior value. Check into any Ritz-Carlton Hotel anywhere in the world and you will be greeted not only by the doorman, but also by a number of small, pleasant surprises. The hotel does not need to ask the name of your employer, your home address, whether you want a nonsmoking room, or if your preference is for foam, non-allergenic pillow. All of this information was obtained during your previous visit to the Ritz Carlton. (Hart, 2006)

There is a big difference between mass customization in traditional way and the new way of customization, personalized products and promotions offered in online businesses or through the Internet. The main differences as stated by Rautenstrauch et al. (2002) are as follows. First, if the product is a digital product, it can easily be bundled to atomic units and rebundled according to a specific customer's needs and preferences with no additional costs. Second, traditional mass customization approaches focus on the product side. However, through the Internet, the competitive advantage is to know which customer needs which differentiated product. Then it is important to do the matching process of the given product attributes with the derived customer attitudes. Third, unlike traditional markets, the mass customization in today's online world is not an strategic option, but a necessity. Hence, the application of mass customization will become a competitive advantage and a focus of further work,

in practice as well as in research.

Based on these results Rautenstrauch et al. (2002) developed a framework, which represents this increasing customer focus and enables an automated, IT-enabled consultation process matching customer data with product data. Thereby this framework laid ground for a detailed analysis of possible business models. Requirements for an effective personalized promotion are as follows:

- A powerful customer interface is required for a successful CRM, that provides the customer information and know-how for effective personalization.
- The implementation of a behavioral model for the description and forecast of customer needs and preferences- e.g. on the basis of attitudes- in a customer model provides a powerful means for the succeeding matching process. Consequently, further research should on the one hand focus on the explanation of customer behavior, and on the other hand on the representation of thereby derived customer know-how.
- For the description of the products by means of relevant product attributes, a meta model and language, like e.g. XML, is required, that is applicable for various kinds of product categories.
- In order to efficiently match the customer model with products, a taxonomy of matching problems and adequate matching inference mechanisms is to be developed.
- A high performance IT system is key for satisfied customers, customer retention and high sales. Therefore, research focus should also be an efficient IT-infrastructures.

(Rautenstrauch et al. , 2002)

Another feature that online personalization has that creates value for the customers is that company provides variety of products/services that matches each customer's preference.

In competing markets, when companies were using mass production, competition made them differentiate their products. Due to high differentiation, some consumers' preferences were not precisely captured. The classic example is heavy beers versus light beers. In order to position themselves more clearly, beer companies would want to take extreme. As a result, customers with moderate tastes were left underserved.

Today, due to prevailing personalization, companies will provide products/services that matches each customer's preference. A company that aspires to give customers exactly what they want must look at the world through new lenses. It must use technology to become two things: a *mass customizer* that efficiently provides individually customized goods and services and a *one-to-one marketer* that elicits information from each customer about his or her specific needs and preferences (Pine II, Peppers, & Rogers, 1995). In today's world, firms are under the pressure to cater to each customer's individual tastes. Thus there is more competition between them that results in decreased differentiation (Zhang, 2011).

Although providing product/service that matches each customer's preferences increases competition between firms, it creates more value to customers and increases preference matching compared to traditional mass production techniques. We address the perils of increased competition between firms as a result of personalization in chapter 2.

There is a need in the art for a marketing system where customers are in control

of their supplier relationships such that only customers with a need and an interest in hearing about certain product and service offers receive the marketing solicitations. New marketing methods help companies provide customers with targeted promotions. Targeted promotions are done through different programs or marketing inventions. One of these inventions mentioned by Mase et al. (2004) is a marketing method for matching plurality of company offers with a plurality of customer profiles. The method includes evaluating the plurality of offers and the customer profiles and matching a selected offer to a selected customer profile. The result is that the messages, emails, promotional offers and website contents that customer receives are related to the customer information. Therefore company's offers are matched with customer preferences and interests.

According to what has been mentioned so far, one could conclude that through personalized online promotions, a customer is able to match a product/service, advertisement, promotional offer and price to her own interests and preferences. But it is a double-edged sword because it will increase competition and decrease differentiation, resulting in less profit for the companies.

3.1.3. Personal Expression

Personalization is the ability to provide individually designed products, advertisements or different types of promotions by the use of the information collected from customer. In traditional ways, customers had limited opportunity to express their opinion about the products/services and all the promotions they received. Companies received customer feedback and measured customer satisfaction directly (e.g. survey) or indirectly (e.g. marketing effectiveness). But in today's world, companies collect data and listen to customers through every interactions they have, from company's website visit by the customer, to customer purchases or customer product reviews. Through the Internet, customers could express their ideas and give feedback more easily. The company personalizes the product/service, advertisements and the promotional offers based on the voice of customer and offers different alternatives to the customer. These alternatives are direct results of customers' voices. Therefore, customers have more influence on the product/service or promotion they receive compared to the traditional marketing methods. In other words, they have more direct and indirect control over their choices. By direct control we mean expressing their interests by interacting directly with the company (e.g. filling out the forms that show what type of services or promotions a customer wants to receive) and by indirect control we mean all indirect activities that give company information about customer interests (e.g. purchase history, website visits, clickstream data, etc.).

Regarding customer's personal expression, Valenzuela et al. (2008) introduces a self-customization concept. Self-customization is the process by which consumers seek to customize offerings to their own preferences. This procedure

is done easily through the Internet platform.

Companies try to correctly uncover individual preferences and provide products and promotional offers that fit those preferences. While one strategy to do so is for companies to measure individual preferences and recommend the best match, another alternative is to provide customers with an interface that allows them to customize their own option. The “customize-it-yourself” or self-customization market is growing at a rapid rate in many different categories (Business Week, Dec. 2002; Wall Street Journal, Oct. 2004). An implicit assumption for the superior value of self-customization is the notion that consumers have inherent preferences compared to a non-customized offer (Valenzuela, Dhar, & Zettelmeyer, 2008).

In today’s new marketing methods, personalized online promotions, customers are able to express their ideas and interests more easily, and customers’ opinions are more quickly applied to product/service design as well as advertisements and promotional offers they receive.

3.2. Disadvantages for the Customer

3.2.1. Privacy

Privacy, often termed as the right to be alone, refers to personal information which has multiple dimensions: privacy of an individual's body, privacy of personal behavior, privacy of personal communication, and privacy of personal data (Luo, 2002). In today's world one of the most important success factors of companies is their access to customer data. Through Internet, collecting customer information is much easier and most of the company's marketing activities rely on those data. At the same time, data collection has always raised privacy concerns among customers and sometimes made them unwilling to provide data to companies.

3.2.1.1. Rising Issue of Privacy

Prior researches of Laufer and Wolfe (1997) shows that customers are willing to disclose their personal information if it is in exchange for some economic or social benefit and if they know that their information will be used fairly and will not lead to any negative consequences. Creating a willingness in individuals to disclose personal information, requires that organizations also view the collection of personal information as a "social contract" in which the customer makes non-monetary exchanges of personal information for intangible benefits such as higher quality service. Customers will continue to participate in this social contract as long as the perceived benefits exceed the risks (Culnan & Armstrong, 1999).

Some industry groups have argued that privacy is a customer service issue. While the literature on customer service has not specifically addressed privacy, it has established a link between being treated fairly and customer satisfaction.

The literature on organizational justice suggests that procedural fairness of company practices can have a major positive impact on trust and privacy perceptions (Culnan & Armstrong, 1999). Firms should consider that treating customers fairly and increasing their trust are important factors influencing privacy concerns.

In recent years, the Internet has established itself as a new medium for marketing consumer and industrial goods and services. However, most sites on the Internet today do not focus on building trust as part of an ongoing relationship with their customers. Many Web sites act merely as self-service catalogs: If you know what you're looking for, you can find and order the product or service. Such sites are commonly characterized by their crowded format, flashing banner ads and off-price promotions. Pursuing the hard sell, these sites do not give customers much information or help in making buying decisions. Not surprisingly, they convert few of their visitors into purchasers, suffer low customer retention and generate meager profits. Many companies have failed with such an approach to marketing on the Internet, primarily because they have failed to build trust (Urban, Sultan, & Qualls, 2000).

There are other factors that should be considered while dealing with privacy issues. Consumer privacy in general has been identified as a "significant marketing issue of the 90's" (Jones 1991, p. 133). The importance of online consumer privacy was reinforced in the U.S. Department of Commerce's (1998) report, *The Emerging Digital Economy*, which stated that the Internet's potential challenges marketers to overcome a variety of concerns, primarily in respect to credit card security and consumer privacy (Sheehan & Hoy , 2000). With recent trend of online personalization, consumer privacy has gained more attention. In

the digital world, accessing customer's data is easier and quicker. Through tracking customer's purchases, website visits and clickstreams, companies are able to collect so much information, which is considered private, from their customers or visitors.

In the arena of Internet marketing, invasion of privacy is commonly interpreted as the unauthorized collection, disclosure, or other use of personal information such as selling it to other e-marketers (Luo, 2002). Different institutes have done some activities in order to increase customer's authority and control on their own data collected by companies. For example, Federal Trade Commission (FTC) has identified five core principles to guide online content providers' development of privacy policy and provide specific instructions as to how online businesses should act to increase online commerce. These five core principles are:

1. Notice: Online consumers should be given notice of an entity's information practices.
2. Choice: Consumer should be given choice with respect to the use and dissemination of information collected from or about them.
3. Access: Consumer should be given access to information about them collected and stored by an entity.
4. Security: Data collectors should take appropriate steps to ensure the security and integrity of information collected.
5. Redress: Enforcement mechanisms, through self-regulation, government regulation, or other means, should be available to ensure compliance.

However, what is absent from the FTC's consideration is the voice of online consumers about their attitudes and opinions regarding privacy concerns

(Sheehan & Hoy , 2000).

3.2.1.2. Dimensions of Privacy

Researches show that most of the customers do not like this new trend of data collection by companies and they are not willing to let companies access such information unless it has benefit for them or sounds reasonable enough. In order to evaluate the importance of data privacy to customers, some factors that influence customer privacy concern will be discussed in the following.

Awareness of Information Collection

The fact that a customer is aware of information collection by a company affects her willingness to share data. In addition, according to Sheehan and Hoy (2000), it is important when customer becomes aware of this activity. Whether it is before or after information collection, it raises different amount of privacy concern for customers. Users will not be as concerned about privacy when marketers obtain permission (either explicitly or by default) from them to collect and use information (Nowak and Phelps, 1995). In other cases, users do not become aware that information about them was collected until after the information is collected. Consumers generally become aware when they receive some type of marketing communication from an entity that has collected information about them. Consumers' privacy concerns are likely to increase as they become aware that marketers have somehow obtained information about them without their awareness or permission (Cespedes and Smith, 1993). Customers have different attitudes toward privacy concerns. It is important that a company convinces all different groups of customers with different amount of privacy concern. According to the researches mentioned before, it is better that a company makes customers aware of information collection before the customers

start visiting the website and also gives them the opportunity to have control on the information collection. The only disadvantage in this approach is that some customers would become reluctant to even visit the website when it is explicitly stated that their information is collected, while they would not be so sensitive if they were warned about information collection at the end or in an implicit way. Companies should be aware of these issues and take it serious because it would result in losing large number of customers.

Information Usage

Another factor that influences privacy concerns is the way that companies use the information collected about customers. If information is used only for the purpose of the original transaction, consumers tend to be unconcerned about privacy. However, if marketers use information beyond the original transaction, consumers become increasingly concerned with privacy (Cranor, Reagle, and Ackerman 1999; Foxman and Kilcoyne 1993). Internet users have indicated that they would be more willing to consider providing information when sites explicitly informed them how the information is going to be used (Sheehan & Hoy, 2000).

Cranor, Reagle, and Ackerman (1999) find that whether information was going to be shared with other entities was the most important factor influencing consumer information disclosure online. Consumers feel a growing lack of control over how their personal information is used by companies and find it unacceptable for marketers to sell information about them. When it comes to the online personalization, during which marketers collect information in order to understand customer's shopping behavior and interests, the privacy concerns increases among customers. Wang and Petrisson (1993) note that a lack of

consumer knowledge of secondary usage of information has caused "strenuous objections" among consumers. Using this data for other purposes, such as compiling shopping behavior patterns, is seen as an invasion of consumers' privacy and an illegitimate use of information on the part of the company (Sheehan & Hoy, 2000).

The strength of examining consumer privacy on the basis of a framework with two dimensions of awareness of information collection and information usage beyond original transaction is that this framework attempts to balance consumer privacy concerns with the information needs of marketers. However, the simplicity of the framework is a key limitation, as it may not adequately capture the complex contextual nature of privacy (Sheehan & Hoy, 2000). In the following, we will examine other factors influencing customers' privacy concerns.

Information sensitivity

People's concern about privacy also depends on their perception about importance and privacy level of the information collected. A distinction between what information about consumers is truly private and what is not is termed "information sensitivity" and has been defined as "the level of privacy concern an individual feels for a type of data in a specific situation" (Weible, 1993). Consumer's concern increases when companies collect and use truly private or sensitive information about customers. There has not been consensus on what exactly is sensitive information. Some people believe that sensitive information is any information that if released or shared could cause harm to the subject of the information. However, it is difficult for people to differentiate between what is genuine harm and what is simply annoyance (Gandy, 1993).

According to Wacks (1989), sensitivity of information can be thought of in terms of the value of each piece of information and the ability to link the information to other pieces of information. The FTC (1996) has also noted that financial and medical information are thought, in general, to be more sensitive and therefore in need of special protection compared to information related to customer's product purchases and media habits. Sensitivity appears to be contextual; that is, what is considered sensitive differs by person and by situation (Sheehan & Hoy, 2000).

Familiarity with Entity

People's privacy concern is closely related to the extent they trust the company that collects data. The trust that customers build into a company is related to their familiarity and history with the company. Rogers (1996) finds that people are more likely to look at mail sent by businesses they know and with whom they have done business. However, consumers are least likely to look at direct mail from a company with whom they have not done business. Rogers (1996) also finds that familiarity with the mail sender is an important determinant of the recipient's intent to respond. Mail from businesses with which the recipient is currently a customer generates more than seven times higher intent to respond than mail from an unknown organization. The similar situation happens in e-commerce. People seem to make distinctions between marketers with which they are familiar and those with which they are not. Sheehan and Hoy (2000) find that people who receive an unsolicited e-mail message from a company to which they have sent an email in the past did not consider the practice an invasion of privacy, even if the unsolicited e-mail had nothing to do with past communications. Similarly, people who receive unsolicited email from a

company whose World Wide Web site they have visited in the past also do not consider that practice an invasion of privacy.

Therefore, marketers should carefully choose those potential customers to approach and consider how to communicate with them. With customers who have done more businesses with the company in the past, the company could send personalized advertisement or promotion more easily because they might be less concerned about privacy. But, regarding the customers who are first-time users of the website or whose data was obtained through resources other than company's own website, the company might raise more privacy concern in case of sending personalized promotions. Therefore, it should consider different strategies to approach them.

Compensation

Compensation helps to reduce privacy concerns. According to Milne and Gordon (1993) it works as an automatic announcement to users that information is being collected and eliminates some consumer privacy concerns up front. Furthermore, compensation indicates an exchange of benefits from the situation. Westin (1997) states that people often consider the nature of the benefit being offered in exchange for information when deciding whether an activity violates their personal privacy. Goodwin (1991) outlines cost-benefit perceptions of information gathering and suggests that some people might be willing to disclose information if they receive some type of benefit from the disclosure. This benefit could have a specific financial value, such as a cash payment, product, or service, and in some cases, the value could be information based, such as access to information that is of interest. Providing compensation to consumers for the collection and usage of information may address some issues of security and

redress, because consumers will view information-gathering practices as an exchange. In an exchange, consumers give up information in return for something of value. This exchange allows online users to become aware that information is being gathered and give permission for such. In addition, the exchange enables online users to weigh the benefits of providing the information against what they will receive for the information (Sheehan & Hoy , 2000).

Adding exchange as a core principle would encourage online marketers to find creative and effective ways to collect information from site visitors and compensate them for it. Marketers might consider exchanging "added value" services with online users, such as special web sites with access to information not available to the general public (Sheehan & Hoy , 2000).

Relationship

This factor suggests that having a mutually beneficial relationship with an online entity will have an influence on privacy concern. This is similar to the previous one, familiarity with entity, but investigates relationship building with customers in more depth and suggests that company create a relationship with customer before beginning to collect information. Building a reputation for fairness and maintaining consistent communication with consumers are effective in creating a sense of control among consumers, which alleviates privacy concerns (Sheehan & Hoy , 2000).

3.2.1.3. Experimental Findings of Online Privacy Issues

In a season of growing concern about privacy on the Internet, The Pew Internet & American Life Project surveyed 2,117 Americans, 1,017 of whom are Internet users, from May 19 to June 21 about trust and privacy online. Their responses illustrated some fascinating cross currents on these issues. Online Americans

have great concerns about breaches of privacy, while at the same time they do a striking number of intimate and trusting things on the Internet, and the overwhelming majority has never had a seriously harmful thing happen to them online (Fox et al., 2000).

The main findings of that report, Fox et al. (2000), are as follows:

Put users first

The vast majority of American Internet users want the privacy playing field tilted towards them and away from online companies. They think it is an invasion of their privacy for these businesses to monitor users' web browsing. By a two-to-one margin they reject the argument made by some firms that web tracking can be a helpful, but users are willing to share personal information under certain circumstances.

Some users employ guerrilla tactics, but most don't exploit the privacy-protecting tools that already exist

In order to protect their privacy, a relatively small number of savvy users are devising their own "opt-in" policies and deciding that some web sites are not worthy of getting their personal information. But most users do not use available privacy-protection tools, perhaps because they are unaware of how web sites work and how existing technologies can be deployed to protect them.

Companies should keep their promises – or else

Internet users want to punish firms and their executives when they violate users' privacy.

The actual incidence of unpleasant events is modest and the incidence of criminal events online is miniscule

Despite their deep-seated concerns, Americans have not been victimized online

in great numbers.

The incidence of trusting activities is high

Americans continue to trust email, surf the web for advice about intimate aspects of their lives, make friends online, and turn to web sites for health information, for spending their money, and for material about their finances.

These findings have some implications for companies and help them realize customer's attitude and expectation toward privacy. More researches have been done to understand customer's concern about privacy regarding personalized marketing.

According to Truste, a nonprofit privacy organization, web users these days know they are being watched and they're not happy about it. Nearly three out of four people, or 71%, said they realize that companies track their web browsing activity for purposes of sending them targeted ads. The majority, 57%, said they are not comfortable with the practice, even when their browsing history can't be linked to their names. At the same time, 72% of web users also told researchers they find irrelevant ads "intrusive and annoying," although one key strategy for displaying relevant ads relies on behavioral targeting, or monitoring where people go online and then determining their interests. The study shows some contradictions. But at least some web users indicated they would welcome targeting that doesn't rely on monitoring their web activity. Fifty-five percent said they would take an anonymous survey in order to limit ads to the products, services or brands they use, while 37% said they would be willing to provide personal contact information with a survey (Davis, 2008).

Another research examines privacy concerns related to "clickprint". According to Padmanabhan and Yang (2006) it can take as little as 3 to 16 sessions to identify

a unique individual based on her clickstream. In 7 sessions they could identify the individuals with 86.7% accuracy, and in 51 sessions with 99.4% accuracy. The theory that web surfers have unique clickprints is based on the idea that humans all have "signatures," such as fingerprints or handwriting styles that uniquely differentiate each person. Padmanabhan and Yang adapt those concepts to web surfing by observing characteristics that are behavioral (such as visiting the same four pages at 8:15 p.m.) rather than physiological (such as a person's appearance).

The importance of clickprints can be significant, given applications to electronic commerce in general and, in particular, online fraud detection. But it has downsides when it comes to consumer privacy. Internet companies and their customers will need to discuss the privacy implications and benefits of using clickprints and anonymous data to identify individual browsing patterns (Padmanabhan & Yang, 2006). Ultimately, communications, perception and expectations all play a role in the privacy debate, says Padmanabhan. The research suggests that communicating expectations to users is critical and that companies should have the privacy conversation in the context of his clickprint findings.

Moreover, Goldfarb and Tucker (2011) explored how privacy regulation in the European Union influenced advertising effectiveness. They randomly exposed users to banner ads and found out that in Europe, where privacy laws had been implemented, banner ads experienced a reduction in effectiveness of 65 percent on average in terms of changing stated purchase intent. The experiment showed no similar change in ad effectiveness in non-European countries over the same time frame. Therefore, based on this empirical evidence, the authors concluded

that privacy regulation can reduce the effectiveness of advertising (Goldfarb & Tucker, 2011).

All in all, customers have different approaches to personalized marketing and some of them are more data sensitive than others. Companies should meet customer expectations regarding data privacy by communicating their intent of data collection with customers and provide customers with some extent of control on their own data. Finally, they should provide some benefits to customers in exchange of collecting data from them and build trust with customers.

3.2.2. Choice Overload

Personalized promotions' primary role is to present relevant choices to the customer. By the help of online customization, there is a fewer number of promotions addressed to each customer that might be irrelevant to customer's needs and wants. Instead, most of the promotions that customers receive from companies that are using personalized online promotions, such as Amazon, eBay and YouTube, are closely related to their previous purchases or visits on the website, implying that there is high interest from the customer's perspective in the promoted service or product. But we could not ignore that there is no limit on the number of these offers received from such companies. As the number of companies using such marketing method increases, there will be more alternatives available for customers.

Most People believe that having so many choices and different options increase their bargaining power and make them better off. Yet recent evidence from the psychology and economics literature suggests that although more choice does provide additional benefits, it also imposes extra costs. Indeed, these costs can

even prevent people from making a decision altogether, suggesting that in some instances, more choice might reduce welfare (Irons & Hepburn, 2007). Different studies and experimental researches show that customers have difficulties making decisions while facing so many alternatives. A growing body of research in psychology and economics demonstrates that agents can be better off with a strictly smaller choice set. Evidence from both the laboratory and the field indicates that a person's willingness to participate in a market, e.g., purchase a good (Iyengar and Lepper 2000, Boatwright and Nunes 2001), take up a loan (Bertrand et al. 2005), or enroll in a 401(k) plan (Iyengar, Huberman, and Jiang 2004), can decrease when participation requires selecting an alternative from a larger set of options (Iyengar & Kamenica, 2007). For instance, early experiments by Tversky and Shafir (1992) found that agents given an enlarged choice set delay decisions or are unable to decide at all.

Studies mentioned above explain customer's decision-making process when they face a lot of personalized promotions. Receiving so many advertisements, price cut, discount, free shipping, etc., creates a large set of choices for the customer. They might be delighted at the beginning by receiving those offers. But when it comes to making decision, having so many offers make it difficult for them to make up their mind. In order to understand this phenomenon clearly we need to know the underlying reasons. Several theories explain such behavior of customers.

First, if agents have self-control problems, more choice provides additional opportunity for self-damaging behavior. Gul and Pesendorfer (2001) noted that the exercise of self-control may incur a utility cost when immediately desirable options are turned down. For instance, a customer may be better off if offered

only a healthy food option, rather than both healthy and unhealthy options, even if they would have shown self-control and taken the healthy option anyway. (Irons & Hepburn, 2007)

Second, 'bounded rationality' may provide an explanation for why more choice reduces welfare. Although a 'satisficing' agent (as described by Simon, 1955, 1959) suffers no negative effects from an enlarged choice set (Schwartz et al., 2002), other heuristics come into play as choice sets expand. Gigerenzer and Goldstein (1996) explained how people may simplify complex search over many options by maximizing only one dimension, for example, price. Experimental research done by Hedesström et al. (2004) shows that people apply heuristics while facing too many options. In addition to the default bias, they show other forms of irrational behavior including extremeness aversion (the tendency to avoid options that appear extreme), the diversification heuristic (the over-estimation of future desire for diversity) and the 1/n bias (the choice of a little of everything offered). However, the evidence that people apply simplifying heuristics does not necessarily imply that more choice decreases welfare. Indeed, because agents could always discard all but a small subset of options, the use of a heuristic on the larger choice set suggests that more choice has increased welfare (Irons & Hepburn, 2007).

Third, as Irons & Hepburn (2007) argue, difficulty in decision making process could be explained by regret theory. Each time customers choose an alternative, they might think they have lost the benefits of other alternative. In other words, the losses related to the alternative that is not chosen will be magnified and seem larger than the benefits gained by having the chosen alternative.

Fourth, when customers face larger choice sets, they end up having higher

evaluation costs in their decision-making process. Jacoby et al. (1974) found evidence that customers end up making worse decisions from larger choice sets when they are told to examine and evaluate all the information. They believe this phenomenon is because of the information processing cost. Chernev (2003) shows that when consumers articulate their preferences then they tend to prefer larger sets of alternatives. This may be because articulation of preferences makes it easier to evaluate the alternatives. Note that having consumers articulate their preferences imposes an upfront cognitive cost of articulation on them, and thus consumers who were not induced to articulate their preferences by the experimenter seem to choose not to do so. The idea of costly evaluation costs goes back to the idea that decision makers may only be able to process a limited amount of information (e.g., Simon 1955, Miller 1956). In this regard, Shugan (1980) considers the costs of thinking and provides a quantitative measure of that cost, related to the number of comparisons necessary to make a decision given some level of confidence. Some work in the literature has considered the effect of evaluation costs on choice problems. Hauser and Wernerfelt (1990) argue that consumers may strategically limit their consideration sets (with search under fixed sampling) to limit evaluation costs at each consumption occasion (Kuksov & Villas-Boas, 2010).

Fifth, in this research it would be argued that customer expectations of receiving more desirable promotions in the future make them postpone their decision-making or even give up on making decision at all. In the traditional marketing, promotions are scheduled and communicated early enough, so that customers prepare themselves for those types of promotions and make their decisions based on them. They could also know about those promotions through word of

mouth and schedule for it beforehand. Nowadays, by using more personalized online marketing, companies are able to offer quickly arranged, short-term promotions, such as “deal of the day”, offered by companies such as Amazon and Trip advisor, to name a couple. The primary function of such promotions is to encourage costumers to decide in a short time and purchase quickly, but when such promotions or deals occur regularly, customers get used to them and expect to see more of them in the future. Therefore, customers may face a decision-making challenge. On the one hand, they feel an urge to make up their mind quickly and not to loose a deal. On the other hand, due to choice overload and facing so many personalized promotions, they may expect to receive better promotions in the near future, therefore they wait and do not make a purchase. However, if they did not expect to have so many other choices, they would not hesitate for purchasing. As we see, having choice overload, make decision-making difficult for the customers because they have high expectations of receiving better promotions consecutively in the future. In reality, they might or might not receive better offers in the future. In either case, they have faced a perplexing decision-making situation. The disadvantage intensifies when they loose a promotion oppportunity and do not receive a similar good one in the future, as they expected.

All in all, providing customers with so many choices through personalized online promotions, creates choice overload that may lead to decision-making challenges. Businesses should be aware of such disadvantage and do not bombard customers with so many alternatives that would confuse them. Instead, they should provide promotion offers in a timely manner, and avoid repeating similar promotions in a very short time.

3.2.3. Perceived Fairness

Personalization method helps a company present each online user a different promotional offer. A user might receive a reduced price or free shipping offer based on her history with the company while her friends might not. How do this user or her friends feel in this situation? Do they have different perception of fairness in this case compared to the time they all received similar offers from the company? How is their satisfaction affected?

Beside consumer privacy and choice overload, another factor that should be considered while using personalized promotions is customer's perceived fairness. According to Chatterjee & McGinnis (2010), perceived fairness will be lower for personalized promotions than for universal promotions.

Simonson (2005) suggests the "customized" label can positively affect perceived fit, assuming that customer trusts the marketer. Inferred motive for the promotion is one of the key antecedents of trust (Campbell, 1999). An inferred motive for a customized promotion restricted to an individual may imply a retailer's willingness to forgo profits (a positive motive) in order to build or strengthen a relationship with the consumer leading to perceptions of fairness. However, concerns of privacy and exploitative use of web monitoring have been consistently borne out in numerous surveys. Customized offers may lead to perceptions of "being singled out" and attempts to manipulate and persuade (Friestad and Wright 1994) increasing perceived unfairness.

Although perceived fairness per se, seems like an issue related to personalized online promotions, it has positive effects on customer's purchase intention. Since personalization requires efforts in specifying consumer preferences and provide identifying information, consumers may perceive an advantageous price equity

and just financial exchange for providing personal information. They may perceive a prerogative of paying a “special” lower price and the process of participating in the customization may lead them to feel smart and competent as shoppers (Schindler, Morrin and Bechwati 2005) than when promotions are offered to all customers. Further, since customized promotions are not displayed on comparison shopping agents, promotions offered after login at retailer site can lead to a “pleasant surprise” effect (Heilman, Nakamoto and Rao 2002), the unexpected gain can elevate consumer’s moods thus increasing purchase intentions (Chatterjee & McGinnis, 2010).

In addition, Chatterjee & McGinnis (2010) found out that promotion type affects the perceived fairness. They compared three types of free shipping, \$ off and discounted price. The results show that perceived fairness will be higher for free shipping compared to \$ off or discounted and this difference will be higher for customized promotions compared to universal promotions. In other words, online shoppers perceive lower prices derived from eliminating shipping charges as a fairer business practice than lower prices derived from a combination of discounts or \$-off offers that include shipping charges (Chatterjee & McGinnis, 2010).

Finally, researches of Tsai & Lee (2007) show that there is difference in perceived price fairness between present and prospective customers. Present customers exhibit higher unfair perceptions than prospective customers when facing the disadvantaged condition. However, when facing the advantaged condition, the perceived unfairness of present and prospective customers is no different. The findings provide additional evidence to support the belief that present customers should be more highly valued than prospective customers.

This is consistent with the arguments of customer relationship management (Winer 2001) (Tsai & Lee, 2007).

4. Dynamics of Customer Behavior

As mentioned in chapter 3, online personalization has both advantages and disadvantages for the customers. The benefits of personalization such as deal value, preference matching and personal expression, encourage customers to provide their information to companies in order to receive personalized offers. But, negative aspects of personalization such as privacy concern, choice overload and perceived fairness issues make customers concerned about revealing their personal information to companies. Eventually, whether positive aspects outweigh negative ones or the other way around, defines customer's behavior. Customer's behavior would also be different in short term and long term. In this chapter, we will examine customer behavior in response to company's personalization practices.

One of the most important issues of personalization is privacy. As mentioned in the previous chapter one solution for privacy concern is building trust. Trust has always been an important factor in company and customer relationship. It is used to improve CRM, increase sales and solve privacy issues.

For the Internet, trust-based marketing is the key to success. Companies can use the Internet to provide customers with a secure, private and calming experience during which they converse with an on-site, trusted personal shopping advisor who is dedicated to helping them make the best decision. Trust-based Websites provide customers with accurate, up-to-date, complete and unbiased information, not only on their own products, but on all the competitive products available in the market. Their smooth, easy-to-use navigation makes searching, shopping and comparing a pleasure. Moreover, they preserve and build trust

through faultless fulfillment and satisfaction guarantees. It is not surprising that trust-based Websites can enjoy higher rates of customer conversion and retention than sites that do not engender loyalty. Trusted Websites actively promote deep customer loyalty, thus greatly enhancing the lifetime value of their customers. By mastering trust-based strategies, companies can build a positive relationship with their customers while increasing their market share and profits (Urban, Sultan, & Qualls, 2000).

Urban, Sultan and Qualls (2000) categorize the keys to building website trust as follows. First, maximizing cues that build trust on the website. Second, using virtual-advisor technology to gain customer confidence and belief. Third, Providing unbiased and complete information. Fourth, including competitive products. Fifth, keeping company's promises.

Manufacturers and retailers must decide how much trust they should design into their Websites. Strategies range from "pressure selling" to developing a "full-trust relationship". Many sites on the Internet today are designed as high-pressure sales environments. A pressure-selling strategy tries to build business by promoting only the seller's products. Information is slanted to win sales; advertising employs flashing banners; messages are pushed along the digital network on the basis of the user's cookie and personal characteristics. Heavy promotion is used to move inventory or stimulate sales of high-margin items. Service is minimal. Results are measured in the short term. In contrast, a full-trust relationship strategy advocates for the customer across all product alternatives, including competitors' offerings. Full and accurate information is presented; advertising is displayed only if the customer requests it; a calm, consultative atmosphere is maintained. Premium prices are justified on the basis

of value added, "high touch" service guarantees user satisfaction over the product's life cycle and benefits are measured by the customer's long-term loyalty to the franchise (Urban, Sultan, & Qualls, 2000).

Enduring customer relationships can generate enormous gains in both sales and profits. Loyal customers are less price-sensitive, and their loyalty reduces the threat of commoditization that is faced by many firms selling on the Internet. Moreover, strong customer relationships open the door to cross-selling of services, an important avenue for business growth. Consumers will enter into a trusting and enduring relationship with suppliers on the basis of the exchange of this information. They will give their loyalty if their expectations are fulfilled. Moreover, they will pay a premium price to the companies they trust. The companies that earn real profits in the rough and tumble world of Internet marketing will be trust generators selling products that deliver the best value in a complete, unbiased, competitive comparison (Urban, Sultan, & Qualls, 2000).

Other dynamics of customer behavior caused by personalization is related to her switching cost. Online personalization can be an important element in both customer acquisition and customer retention strategies. In fact, it has been argued that providing personalized services not only increases customer's loyalty, but also increases her switching cost due to the information acquired through personalization. This will also justify the first mover advantage for personalization leaders (Chellappa & Sin, 2002). When switching cost is high, a customer would not consider moving to competitor's company. This will decrease churn rate and increase customer lifetime value. The result of it is more profit for the company in long term.

Customer's perception of the value they receive from personalization affect their

purchase intent. Whether the benefits they receive outweigh the disadvantages of personalization, their behavior will be different. If their perceived benefit is higher than disadvantages, customers' purchase intent will increase due to personalization.

Since customization requires efforts in specifying consumer preferences and provide identifying information, consumers may perceive an advantageous price equity and just financial exchange for providing personal information. They may perceive a prerogative of paying a "special" lower price and the process of participating in the customization may lead them to feel smart and competent as shoppers (Schindler, Morrin and Bechwati 2005) than when promotions are offered to all customers. Further, since customized promotions are not displayed on comparison shopping agents, promotions offered after login at a retailer site can lead to a "pleasant surprise" effect (Heilman, Nakamoto and Rao 2002), the unexpected gain can elevate consumers' moods thus increasing purchase intentions (Chatterjee & McGinnis, 2010).

Based on what discussed so far regarding customer behavior, we present a conceptual framework in figure 1 that shows how different elements affect customer behavior with regards to personalization.

As we discussed, there are different factors affected by personalization, but we do not show all of them in the framework. We have chosen those factors that have the most influence on customer's purchase intent and company's profitability. There are several loops and connections in the figure that will be discussed one by one.

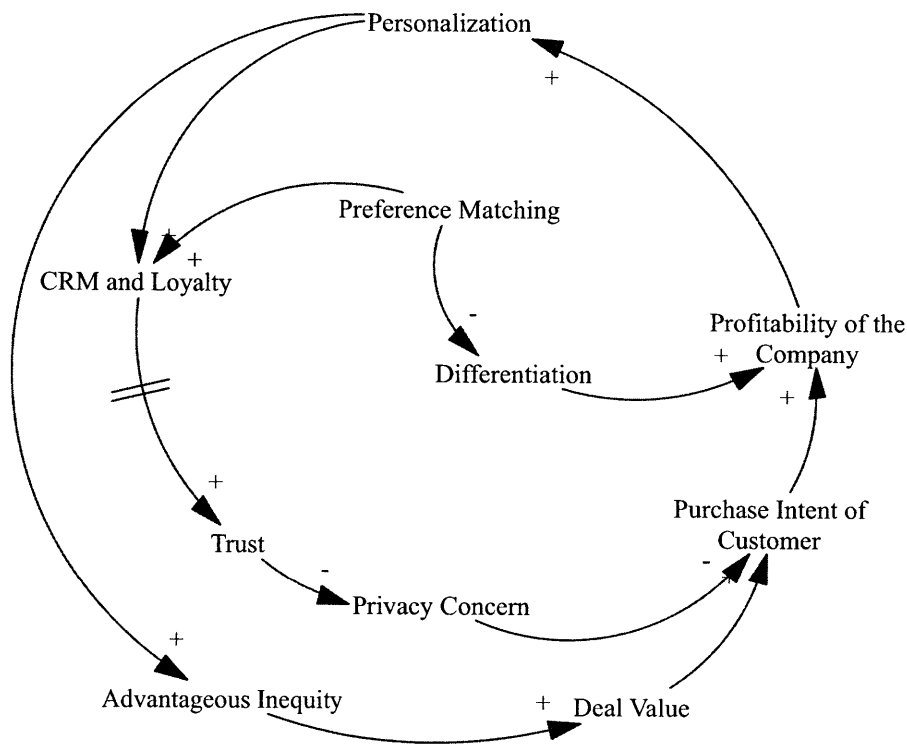


Figure 1 – Personalization and Customer Behavior

Trust Loop

As shown in figure 2, in the trust loop personalization improves CRM of the company. CRM improvement helps in relationship building between customer and company. It should be noted that this happens in long term. Generally, relationship building is a long term activity. By the help of better CRM, company could build trust. As shown in the figure there is a delay between CRM and trust because it takes time that a company builds trust with a customer. It is obvious that customer behavior changes after she has trust in the company. The most important change is that there will be less privacy concern. Thus customers are more willing to reveal their data. At the same time their purchase of intent

increases because they have trust in company and its products/services. Therefore, company's profitability increases. When company has more profit, it will invest more on personalization and the cycle continues. It should be noted that if one of the connections in the loop is lost, customer behavior would be affected. For example, if company does not have a good CRM and does not build trust, gradually customers will lose their trust in company. So they will have more privacy concerns and less purchase intent that eventually will have negative effects on profitability.

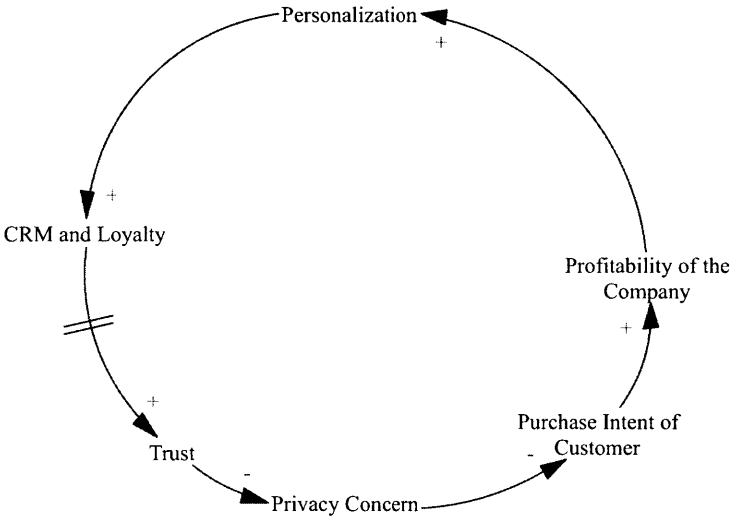


Figure 2 - Trust Loop

Deal Value Loop

Second loop, deal value loop, is shown in figure 3 and it presents the effect of perceived deal value on profitability and personalization. It refers to the fact that

if company uses personalized promotions and rewards its own customers, its customers will feel advantageous inequity. Thus the deal value increases for customer and she will have higher purchase intent. This will again increase profitability and result in higher investment on personalization.

We could find similar loops for other beneficial factors of personalization such as personal expression and preference matching that we discussed in chapter 3. But we avoid repetition here and examine those factors that have different effects on customer behavior.

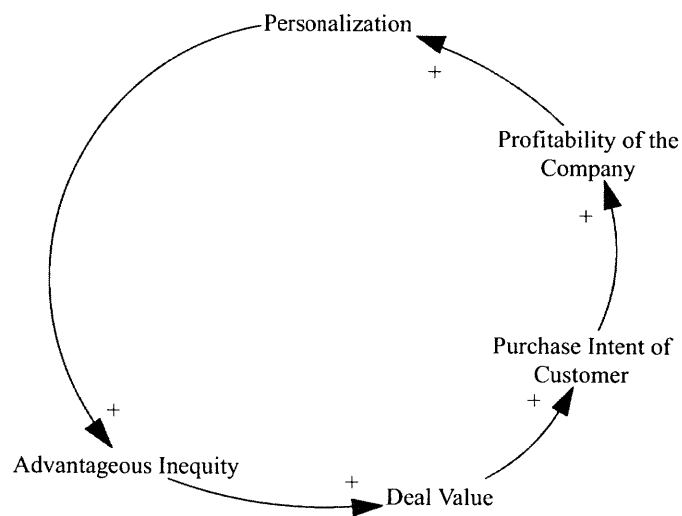


Figure 3 – Deal Value Loop

Preference Matching Dual Effect

Now we would like to consider a factor, preference matching that has both positive and negative effects on the company. On the one hand, it will increase

customer satisfaction and improve CRM, resulting in more profitability. On the other hand it will increase competition between companies and decrease differentiation, resulting in less profitability. In such cases, companies should pay more attention on their strategies and choose those strategies that will benefit the company (for more information see chapter 2 and 3). Those relationships are shown in figure 4.

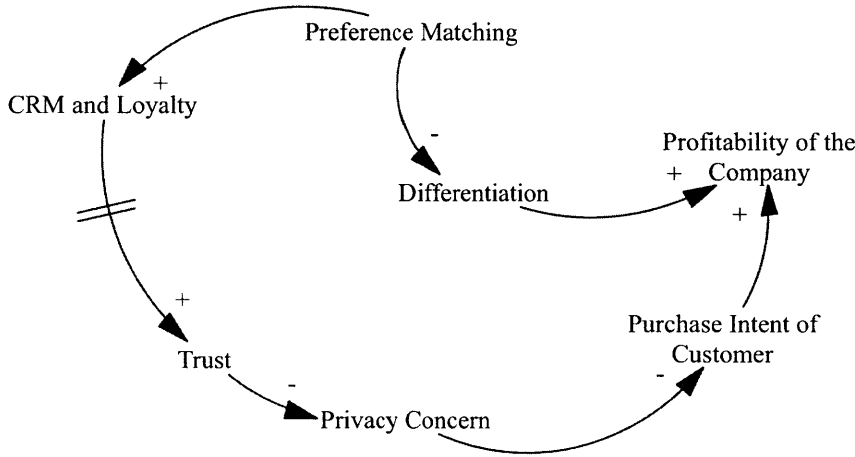


Figure 4 – Preference Matching Dual Effect

5. Conclusion

Personalization is an increasing trend that companies use in every aspect of their marketing activities and it has become a necessity for a company. Recent technological advances have made online personalization easier than before. It creates more value to both company and customer.

It should be noted that personalization has also created some disadvantages for company and customer. However, solutions have been found for those issues that made it possible for companies to increase using personalization method and add value for customers.

In order to address customer's concerns about personalization, companies should use different strategies. The most important issue related to online personalization is privacy concern. Companies could address this issue by letting customers have control on their information and by building trust with them. If customers trust companies, they will more easily provide companies with their information. In addition, companies should avoid repeated similar personalized promotions in order to address the issue of choice overload. Moreover, companies should make important decisions regarding price-customization of either own company's customers or competitor's customers. Under different market conditions, one of those alternatives is more profitable. Thus, companies should choose the best strategy.

Regarding addressing the issues of online personalization from company's perspective, there are different strategies that could be used by the company. First, companies should use customer's expectation management. One of the major costly factors of personalization is the cost of increased customer's

expectation. Therefore, companies should use Internet to manage expectations of customers. In addition, for addressing decreases competition issue, Zhang (2011) expresses that companies could provide customers with classic designs and let customers to self-select among personalized designs.

There are several areas for future research in the field of personalization. Companies are applying personalization methods more and more, but there are still some challenges, as mentioned in this study, that are not completely solved. Some of the solutions have been addressed in this study, but there should be more research on how to overcome disadvantages of personalization especially from customer's perspective. Social networks are making personalized Ads and promotions more applicable and easier. The role of social advertising should be examined more deeply. In addition, mobile platform is becoming so popular in helping different marketing activities of businesses. For example, there is an increasing trend in using mobile Ads that could be examined. It is important to study the effectiveness of mobile platform in personalization.

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