# Gauging the Impact of e-Coupons on B2C Retail Markets 

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## ABSTRACT

As retail consumers are using mobile devices to access the Internet for information and actual purchases, retails are trying to create promotional campaigns that take advantage of this trend by offering digital coupons? However, there are a number of consumer preferences than marketers need to understand when creating marketing strategies. A survey addressed 5 factors that could affect a customer's likelihood of utilizing e-coupons. It was hypothesized that customers will consider themselves loyal customers, but will change their purchase habits for retail (e.g., clothing and accessory purchases) and electronic goods due to an e-coupon offer. Customers disliked e-coupons with threshold values regardless of their annual income. Customers will consider coupon misredemption fraud as an issue for businesses in a negative light, but will admit to searching for coupon codes online. Most of the hypotheses were found to be statistically significant, suggesting management may need to re-evaluate its strategy the B2C retail industry and change how retailers implement e-coupon campaigns as a vehicle to drive CRM initiatives.

### 1.1 INTRODUCTION

### 1.1 Examining the Role of Coupons in Marketing

The use of coupons is not a new trend in the business-to-consumer (B2C) marketplace. In fact, the first coupons date back over 120 years (Belch \& Belch, 2015). However, couponing is becoming more widely used and businesses are leveraging new technologies to improve the customer buying experience. For example, businesses are embracing the Internet, email, social media and mobile technology as a means to easily distribute and measure the effectiveness of ecoupons. For the sake of this analysis, the focus will be on retailer e-coupons. Manufacturer coupons are outside of the scope of this analysis, however, the B2C marketplace, specifically grocery stores, are flooded with manufacturer coupons. The manufacturer for their particular products issues manufacturer coupons.

The use of e-coupons is directly related to customer relationship management (CRM) and businesses are utilizing e-coupons as a means to connect with a broader audience and gain more exposure. However, e-coupons present advantages and disadvantages for both the customer and retailer. Likewise, numerous factors affect how successful e-coupons are for retailers. These
factors include, online versus in store shopping preferences, customer loyalty, price sensitivity, coupon misredemption and coupon clutter. Due to recent difficult economic climate and changes in customer needs, retailers need to be cognizant of how to successfully implement an e-coupon campaign as a way to better manage customer relationships. Demonstrating the major forces discussed and empirically measured in the present study can be found in Figure 1.


Figure 6 Basic conceptual model of gauging the impact of e-coupons on consumers.

### 1.2 Examining the Role of CRM in Marketing

Customer Relationship Management (CRM) refers to the technology systems that help a company serve, satisfy and retain customers (Rayport \& Jaworski, 2004). CRM systems require significant investment in time and money. However, if implemented properly, they can enable companies to gather and store dynamic information about their customers. Such information could include demographic information, geographic locations and the past purchase history with a company. This information is invaluable and allows a company to enhance the communication process with their customer base in a timely manner (Alderete \& Gutiérrez, 2014). Some researchers argue that companies are actually able to react instantaneously to changes in
customer demands. All of these enhanced sources of communication is of considerable importance to a company, since CRM-embedded systems allow management to efficiently customize and personalize the communication with customers (Chand, Raj, \& Shankar, 2015; Han, et al., 2015; Soon, et al., 2015). The hope is that this personalization will result in a more satisfied, loyal customer through enhanced technological and communication systems integration (Marthandan \& Tang, 2010; Shukai, Chaudhari, \& Dash, 2010; Sundarambal, Dhivya, \& Anbalagan, 2010; Elysee, 2015; Latha \& Suganthi, 2015). Strategic CRM systems are touted to bolster revenues and retention while significantly reducing marketing costs (Rigby \& Legingham, 2004). The opportunities are endless with the proper use and implementation of a CRM system, however there are difficulties that companies encounter when implementing such a system.

CRM systems typically are not set up within one specific department within an organization. Rather, they are integrated throughout the company and touch multiple departments such as sales, marketing, supply chain and human resources (Daim, Basoglu, \& Tanoglu, 2010; Dominic, et al., (2010; Kapur, et al., 2010; Keramati \& Behmanesh, (2010). A CRM system be applied only to a process that is vital to a company's competitiveness (Rigby \& Legingham, 2004). A common issue when implementing a CRM system is choosing a system before a strategy be formulated. This is a fundamental business mistake because a company's CRM strategy should determine the type of CRM system purchased and ultimately how it is implemented within a company. The strategy should be well defined and narrow in scope. Some companies use CRM to transform their entire business and this is will prove to be an unsuccessful CRM implementation. Likewise, companies should leverage their strategy and purchase a CRM system that fits their business needs. All too often, management may purchase a CRM system because of their capabilities but fail to realize that the system may not match up to their specific customer strategy. This means that from the beginning there may be a cognizant disconnect between the CRM systems capabilities and the needs of the company.

CRM systems are employed to effectively deploy a targeted e-coupon campaign to customers. Companies \{for the sake of this analysis we will focus on retailers specifically\} can utilize CRM systems to target customers based on demographic, geographic and past purchase history. Retailers are then able to deploy personalized e-coupons to customers based on this invaluable personal information. This will benefit consumers because they will be more likely to redeem an e-coupon that is relevant to their specific needs. Likewise, a targeted e-coupon campaign will benefit retailers because it will decrease their marketing costs, increase sales volume and profits for the company. The next section will discuss the history of e-coupons as well as the advantages and disadvantages of e-coupons from both the customer and retailer perspective.

### 1.3 Purpose

Retailers are increasing their use of coupons within the B2C marketplace because of economic pressures and more cost conscious customers. Moreover, retailers are leveraging online only coupons to increase online sales. The main purpose of the present study is to shed some insight
of the relative impact of B2C e-coupons on customer loyalty, price sensitivity, misredemption, and coupon clutter.

To accomplish this goal, we attempt to examine the impact of e-coupons on business-toconsumer (B2C) retail e-commerce sites from a customer relationship management (CRM). The impetus for this research is two-fold. First, the recent challenging economic climate has made it imperative for customers to be concerned with saving money on retail purchases. Secondly, customer's needs are ever changing and retailers are always looking for novel ways to increase their CRM efforts in order to cultivate new relationships and gain access to a newer, broader customer base. This analysis provides an overview of CRM, the history of coupons as well as advantages and disadvantages of e-coupons from both the customer and retailer perspective.

For the sake of this analysis, misredemption occurs when a consumer presents a coupon, which is actually invalid and/or not meant for that particular end user, but the retailer accepts it. Likewise, this analysis only researches the impact of retailer coupons, manufacturer coupons are strictly outside of the scope of this research effort.

### 2.0 BACKGROUND

### 2.1 Historical Perspectives of E-coupons

The history of coupons extends approximately 120 years and still remain an essential part of the American lifestyle ("Despite redemption fraud ...," 1981; Eid, 2011; Smith, 2008, 2010). Coupons have drastically evolved from their inception but the impetus is the same: they are a mechanism for saving customers money. The first e-coupon was thought to have been launched in 1990. B2C retailers utilized e-coupons as a way to advertise their products/services. ECoupons quickly gained popularity among customers because they have the potential to be printed at unlimited quantities. There have been many revisions to e-coupons since 1990 including, but not limited to, restricting the number of redemptions and adding a barcode to mitigate the chance of accepting counterfeit coupons. However, the refinements have not stunted their growth. In fact, there has been an increase of $263 \%$ in the usage of online coupons from 2008 to 2009 (Hameed, 2011). With the advent of mobile technology, coupons are continuing to transform B2C marketplaces. E-coupons have now made their mark on smart phones via the iPhone, Android and others. There are a variety of mobile applications that are available for download that gather e-coupons based on your geographic location. An example of this type of technology is Groupon or LivingSocial. This enables all discount offers to be at the customer's fingertips. According to eMarketer, by the end of 2012 there will be 92.5 million online coupon users in the U.S., thanks to driving factors such as tech proficiency, an increase in price-consciousness, and overall growth in customer savvy ("Research: Digital coupons," 2012). This recent advancement in e-coupons illustrates that this marketplace is ever changing and how customers use and redeem e-coupons is likely to change again in the near future due to enhancements in technology and changing customer demands.

On the surface, some might ask why do retailers use e-coupons as part of their integrated marketing communications strategy? Perhaps, the answer to this question may lie in branding and personalization goals associated in CRM initiatives. For example, many retailers have chosen to utilize e-coupons as part of their marketing strategy because it helps to build brand awareness and brand equity. Even if redemption rates are lower than expected, the retailers brand advertised to its potential customers. By simply embracing modern technology, companies are able to increase their reach with customers via e-coupons. Secondly, e-coupons allow retailers to personalize and individualize offers to their customer base. Such personalization can include specific e-coupons based on geographic location, demographic information or past purchase history. Companies are leveraging their customer data to provide more targeted promotions in the hopes that the redemption rates increase. Lastly, e-coupons allow retailers to reduce their marketing costs. By utilizing e-coupons, companies are decreasing their print and distribution costs. E-coupons allow for more efficient Tracking purposed via online dashboards. This enables a process improvement on the back end for companies (Kelly, 2011; Smith, 2008).

### 2.2 Balancing Managerial Aspects of E-coupons

There are a variety of strategic advantages and disadvantages that are associated with B2C ecoupons both from a customer and retailer perspective. It is important to take advantage the perspective of the customer in any discussion of managing a strategy that includes e-coupons. For customers, the main advantage of e-coupons is the monetary savings. While an e-coupon offer may vary by retailer, the main objective is the same. A soft benefit of e-coupons is the ease of use for the customer. These offers are either emailed or pushed directly to customers' mobile devices. E-coupons ultimately are tied to customer loyalty cards by loading the e-coupon to the card online. This allows for easy redemption for the end user. Based on a November 2011 survey administered by eMarketer, it was found that $27 \%$ of respondents preferred receiving digital coupons and deals as opposed to getting them offline, compared with $33 \%$ who still preferred print versions ("Digital coupons rival ...," 2012).

There are a few potential disadvantages that e-coupons present for the customer. First, coupons, not specifically e-coupons, may encourage customers to spend more. According to Cotter Cunningham, CEO of RetailMeNot ${ }^{\mathrm{TM}}$, retailers are using coupons to increase the average order volume (Mies, 2010). Coupons that require a threshold amount are actually causing customers to spend more just to redeem the coupon. This is a serious consideration, since typically customers who are using coupons are cost conscious and this strategy forces them to spend more money. Undoubtedly, e-coupons may pose a perceived threat to the privacy of customers. When a customer redeems an e-coupon, the practice allows the company to Track his/her purchases and spending habits. For example, suppose a user logs into Ebates.com via Facebook Connect and obtain a coupon for Ruby Tuesday. When the coupon is scanned, the user enjoys the discounted dinner. However, once the restaurant scans the coupon's barcode, they can Track it back not only to the search terms used in Ebates.com to find that coupon, but to the Facebook ID, including name, location, gender and your interests (Mies, 2010). While most of the data
captured from redeeming a coupon is harmless, customers need to be aware that this is a potential disadvantage and they should protect their sensitive information on social networking sites so they are not vulnerable to privacy hacks.

From a retailer's perspective, e-coupons increase the brand awareness and brand equity of an organization. Data from a survey administered by Coupons, Inc reported that coupons increase a brand's equity and perceived value for an organization. In fact, $58 \%$ of those surveyed say they believe a brand providing coupons online is more likely to provide new products that they will enjoy. Likewise, $57 \%$ say those companies care about keeping them as a customer ("Online 'coupon clickers' number ...," 2008). Another benefit for retailers is that e-coupons hope to increase sales volume, thus increasing profits. This is a rather obvious advantage from a retailer perspective. Industry metrics illustrate that active coupon users spend more online. Moreover, future coupon users are expected to spend more. Forrester data show that consumers who are likely to use more online coupons in the next 12 months will spend nearly three times as much online as those who are not likely to use more online coupons in the next 12 months, US $\$ 1,635$ compared to US\$613 ("Online coupon use rises," 2011). In theory, e-coupons have the potential to increase customer satisfaction, which could lead to customers' willingness to pay more for the products/services and positive word-of-mouth for the retailer. According to Gonynor (2015), approximately $96 \%$ of all mobile users are expected to search for digital coupons in 2015 (significant jump from 2014, when it was about 70\%. It is further estimated that $44.5 \%$ of marketers will use digital coupons as an important part of their strategy in 2016. Lastly, ecoupons can have a role in determining customer lifetime value (CLV) and may ease retention costs.

There are a few potential disadvantages associated with e-coupons from the retailer's perspective. First, and most significantly, misredemption has serious business implications for companies. According to a 1994 article published by Inc.com, it is estimated that $7 \%$ of coupons are "bad" in a US\$6B industry. That's over US $\$ 400,000,000$ worth of coupons that can be misredeemed. These are very high numbers and can seriously impact the bottom-line for a company. A second disadvantage of e-coupons is 'coupon clutter.' Due to the increase adoption of technology, retailers are sending more and more coupons via email and mobile devices. The result is a coupon cluttered marketplace. This is a disadvantage for companies because they need to work to differentiate their e-coupons and make them stand out against the clutter of coupons in the marketplace. Lastly, e-coupons initiate a customer trend commonly referred to as 'expectation mode.' This is when customers come to expect retailers to launch new e-coupons and they wait for the best possible deal before redeeming. This is a disadvantage for the retailer because it costs the company money to develop and promote an e-coupon offering and it may not be redeemed because the consumers may not feel that it's a rich offer.

This discussion hopes to illustrate the potential advantages and disadvantages of e-coupons from both a customer and retailer perspective. However, these are not the only factors affecting the impact and success of e-coupons in the marketplace. In the subsequent sections, we introduce five factors and discuss how they influence the effectiveness of e-coupons in the B2C
marketplace. As stated previously, the scope of this analysis is focused solely on retailer ecoupons in the B2C marketplace; manufacturer coupons are outside of the scope and are not analyzed as part of this research paper.

### 2.3 Online versus In-store Purchases

One of the major factors influencing the effectiveness of e-coupons is a customer's preference to purchase online versus in a brick and mortar store. Ultimately, this decision will vary by customer but B2C companies need to be aware of the managerial implications of both preferences. Likewise, there are advantages and disadvantages associated with either approach ("Despite redemption fraud ...," 1981; Mies, 2010; Nack, 2003; Needleman, 2011). However, companies need to understand the preferences of their target audience in order to satisfy their needs. If customers are not willing to shop online, then companies should rethink their marketing strategy if it includes the use of e-coupons. Customers who do not wish to shop online may not be enticed by e-coupons; there may be a better way to advertise to them.

According to a Nielsen Company survey, $81 \%$ of consumers choose to shop online because they can shop at any time of the day, $77 \%$ said they like to save time, $61 \%$ said they like to comparison shop, and $56 \%$ said they like it because they can find things easily. Interestingly, just $46 \%$ listed low prices as a reason to shop online, and $24 \%$ cited low shipping costs (Rox, 2007). Likewise, a similar study conducted by BizRate Research, a Shopzilla company, for Shop.org, found that convenience is the largest factor in influencing consumer's behavior to purchase online. Nearly $58 \%$ of those surveyed identified convenience as the number one factor. And, trying to lure in the bargain hunters, theShop.org survey found that nearly two-thirds of retailers will offer online-only sales this year, up from $59 \%$ a few years' prior (Rox, 2007). This data speaks for itself and should illustrate that customers are looking for convenience and cost savings; e-coupons satisfy both of those customer needs. The next important task for retailers is build customer loyalty through the strategic leveraging of e-coupons.

### 2.4 Customer Loyalty Aspects

Customer loyalty can be defined as a key objective of customer relationship management (CRM) strategic initiatives by promoting loyalty as a type of trust that is established among customer and companies, persons, products or brands (Smith \& Potter, 2010). This topic is of interest to companies as the cost of acquiring a new customer is generally greater than the cost of maintaining an existing customer. Research shows that it is 5 times more expensive to gain a new customer than it is to keep an existing one (Smith, 2010; Smith \& Potter, 2010; Smith \& Racic, 2009). That said, customer loyalty should be a goal for every organization because it lowers the cost of doing business. Research shows that loyal customers spend more money with a company (Smith, 2008, 2010), which supports that old adage: " $80 \%$ of your business comes from $20 \%$ of your customers" ("How \& why to keep ...," 2009). Lastly, loyal customers tend to be satisfied customers and satisfied customers are likely to tell others about their positive experience with your company. A benefit of customer loyalty is free word of mouth advertising.

Loyal customers will be much more likely to tell their families, friends and acquaintances about your business. Not only does a loyal customer spend more, they generally bring new customers.

Eid (2011), for example, explored the factors that determine the B2C e-commerce customer satisfaction, trust and loyalty in Saudi Arabia. Saudi's unique culture poses a precedent and provides a significant model in the developing Arab world of at least 20 Middle East nations who share consumer personality toward online merchandise. Previous studies provided an overview regarding factors influencing satisfaction, trust, and loyalty characteristics of Saudi Arabians as well as demographic difference in B2C e-commerce adoption.

Hence, there are a number of theoretical research models developed based on hypotheses that the relationships between the e-customer satisfaction and trust identified key factors such as the user interface quality, service information quality, security risk perception, and privacy perception (Adams, et al., 1992; Ajzen \& Fishbein, 1975; Bruner \& Kumar, 2005; Burton-Jones \& Hubona, 2005). Data analyses were performed based on consumers' response on a set of survey questionnaires. The testing confirmed that user interface quality (UIQ) and information quality (IQ) of e-commerce are key factors in customer satisfaction and loyalty among online retailers with UIQ having a positive direct relationship with service trust, which interestingly is not found on IQ. This study identified that while perceived security risk and perceived privacy do not make significant influences on service satisfaction, they found a strong positive relationship with service trust.

Moreover, the study revealed that customer satisfaction and loyalty are two important attributes in B2C online business. E-commerce service trust appeared to have weak influence in consumer loyalty. The study further proved a non-causality relationship between user interface quality and e-commerce website-service information quality to arrive at a strong and high quality recommendation for each development. As it is almost a universal perspective, the e-commerce consumers' perceptions on the level of security risk and privacy are major concerns that should be incorporated in system development.

E-coupons provide an avenue for companies to increase customer loyalty. According to data released in August 2011 by RetailMeNot.com and Harris Interactive, $82 \%$ of online shoppers say they are more loyal to businesses that offer regular discounts than to businesses that offer occasional discounts (Marketing Charts, 2011). As mentioned previously, customers enjoy the convenience that shopping online offers and they are looking for ways to achieve cost savings. Alternatively, companies are looking to build loyalty among their customer base; e-coupons satisfy the needs of both the customer and retailer. Once customer loyalty has been designated as a key objective for retailers, the next factor impacting the use and implementation of ecoupons is price sensitivity. Retailers need to understand the amount of discretional income their target audience has available to spend. Moreover, companies need to determine the price elasticity of their goods/services in the eyes of a customer.

### 2.5 Price Sensitivity

The main objective of a coupon is to decrease the cost for a customer to acquire a good/service. Due to the recent recession and economic slowdown, customers are more cost conscious than ever before. According to data from the Bureau of Labor and Statistics, between 2007 and 2010, average annual consumer spending per unit-defined as a family/shared household or single/financially independent person-fell by $3.1 \%$ to US\$48,109. Average prices over this period have risen by $5.2 \%$, so real consumer spending has fallen by almost $8 \%$ ("US consumer spending ...," 2011). Additional research illustrates that overall self-reported daily consumer spending in U.S. stores, restaurants, gas stations, and online averaged US\$69 per day during May -- up from US\$65 in April, but not as good as the US\$72 average of May 2010 (Jacobe, 2011).

With the memory of the recent global recession, consumers are still looking for easy ways to save money. Data illustrate that more than US $\$ 1.2$ billion in digital coupons savings were issued from Coupons.com last year, representing a 41\% growth over 2009 ("Research study shows ...," 2017). Likewise, $88 \%$ of visitors to coupon websites, versus $78 \%$ of all respondents, agreed with the statement that coupons "close the deal" for them when they are undecided on a purchase ("Online coupon use rises," 2011). The data provided illustrate a serious consumer need for cost savings opportunities. Companies need to understand the needs of their target audience and tailor their e-coupon offers accordingly. There are financial implications for company, since a decreasing trend in consumer spending and the accompanying reliance on increased need for coupons may result in highly probabilities of reduced profits or breaking even on promotional offers (Fisher, 2001; Flavia'n \& Guinalý'u, 2006).

### 2.6 Coupon Misredemption Concerns

Coupon misredemption occurs when a customer presents a coupon that is invalid but the retailer accepts it. For the sake of this analysis, we will expand the definition to include coupons redeemed by an individual who did not originally receive the promotional offer. This trend has serious business implications for companies across the globe and concerned with minimizing the damage caused by such fraud. For example, the Coupon Information Corporation's (CIC) main objective is to fight coupon misredemption and fraud. This not-for-profit organization was formed in 1986 and works with Federal, State and Local Law Enforcement to fight coupon fraud. Previous research on coupon misredemption provides varying statistics, but on average, it is estimated that coupon misredemption costs companies hundreds of millions of dollars annually ("Online ‘coupon clickers ...,' 2008; "Research study shows ...," 2017). From a retailer perspective, this is a serious financial issue. Coupon misredemption is a financial risk and is a fraudulent activity. From a customer's perspective, coupon misredemption is fraud and legal action will result against consumers who are caught participating in this type of illegal activity. For example, according to a recent article ("The current state of coupon ...," 2016), the illegality is probably the major deterrent against coupon fraud. The latest punishments at the date of the citation are as follows: Longest prison sentence is 17 years, the highest financial penalty is US\$5 million, but US $\$ 200,000$ are more common, and prison sentences of 3 to 5 years are common.

Ultimately, consumer loyalty can be enhanced through more secure measures to protect against fraud of all types.

Some industry experts are attributing the Internet to the widespread increase in coupon misredemption (Flavia'n \& Guinalý'u, 2006; Kim \& Tadisina, 2010). The Internet is enabling coupon counterfeiting to be easier than ever, as suggested by Miller, president of the marketerfunded, non-profit Coupon Information Corp. (Nack, 2003). At least one consumer Web site compiles a database to help users decode barcodes, Mr. Miller said, which could be used to help create counterfeit coupons. Some hackers have discovered ways to capture images of online coupons and make limitless copies, he said, while others are using software that is harvested from the Internet to capture and manipulate barcodes that can be used to make more typicallooking coupons (Nack, 2003). Coupon fraud has been an issue for quite some time, but with the advent of new technologies, it is extremely sophisticated and difficult to halt.

### 2.7 Coupon Clutter Issues

One of the most important, yet challenging, tasks for B2C companies is coupon differentiation. It should be no surprise that the B2C marketplace is flooded with coupons and promotional offers (e.g., this phenomenon is commonly referred to as coupon clutter). Too many coupons are clutter. They take the form of newspaper clippings, spam e-mails and miscellaneous membership benefits. Some consumers fail to take advantage of these offers. But are they really utilized when they are issued so prolifically (Kelly, 2011)? This is a concern for both retailers and customers. From a retailer perspective, coupons are a significant promotion to invigorate sales and increase short-term profits. However, coupon clutter is a threat for companies because they need to differentiate their promotional offers in order to gain mind-share from consumers.

From a customer perspective, coupon clutter is confusing and overwhelming to them. Every customer can relate to receiving a plethora of e-coupons via email, direct mail and promotional offers via TV and radio advertisements. Consumers are inundated with coupons and promotional offers and this trend may cause consumers to de-value coupon offers because of the amount of offers flooding the market. Potentially, coupon clutter has severe business implications for a company. If customers do not value the offer, they are not likely to redeem the offer. Thus, retailers are not increasing their sales volume or profits as expected.

### 3.0 METHODOLOGY

### 3.1 Sample Selection

A survey was created and electronically distributed over 300 potential responders, with a successfully returned sample size of 113 individuals ( 47 males and 66 females; refer to Table 2). The survey focused on the following sections: Internet usage, preference to shop online versus in a brick and mortar store, customer loyalty, price sensitivity, coupon misredemption and coupon clutter.

Demographic information was gathered and analyzed on all respondents. Professional business members of the authors' Facebook and LinkedIn contacts comprised the principal population sample. Each received an electronic questionnaire and were encouraged to share it with coworkers. The rationale for the selection of participants included working management professionals with college and/or professional training, as well as those with managerial responsibility at their firms for managing marketing communications and promotions. There is a mix of individuals from a number of age groups as well as both males and females. Not only did this sample enable the researchers to have a relatively large portion of individuals participate in the research, but it may help to clarify whether there are certain trends within the age groups or whether males and females are affected by marketing promotions, especially e-coupons and their effectiveness. Most of the questions were in a multiple-choice format and a majority utilized the Likert scale. The Likert scale has been the preferred format with public surveys that typically deals with the measurement of opinions or attitudes (Sakkthivel, 2009; Shukai, Chaudhari, \& Dash, 2010).

### 3.2 Specific Research Hypotheses

As previously stated, the thesis of this research paper argues that retailers are increasing their use of coupons within the B2C marketplace in part due to economic pressures and more costconscious customers within the e-commerce marketplace. Moreover, retailers are leveraging online only coupons to increase online sales. This study attempts to determine the impact of B2C and its e-promotions on customer loyalty, price sensitivity, misredemption and coupon clutter. For the sake of this analysis, misredemption is when a consumer presents a coupon, which is actually invalid or not meant for that particular end user, but the retailer accepts it. Three specific research hypotheses are identified in Figure 2.


Figure 7 Summary of specific research hypotheses.

### 4.0 RESULTS

### 4.1 Descriptive Statistics

Tables 1 and 2 illustrate descriptive statistics of scaled variables and frequencies of non-scaled variable, respectively. As evident from the descriptive statistics, the sample was composed of relatively sophisticated web users, but they still perceived some skepticism about moving online for the majority of their purchases [e.g., how often do you shop online (2.89), prefer to shop online versus in store for retail (2.50), prefer to shop online versus in store for electronics (2.85), and prefer to shop online versus in store for luxury (2.20)]. The variables, use of credit or debt was extremely high (4.04), E-promo would encourage a purchase online versus in store (3.84), Value if dollar-off coupon (4.27), Value if percent off coupon (4.31), Value if coupon that provides free shipping (4.39), and More likely to use a coupon when it is a rich offer (4.20) all indicate that the respondents were respective to the inherent value of e-coupons to encourage additional spending.

| Variable | N | Minimum | Maximum | Mean | Std. Deviation |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Internet for personal use (1=never, 113 <br> $5=$ daily $)$ | 1 | 5 | 4.73 | .720 |  |


| Internet for work use (days per week) ( $1=0-1,4=6-7$ ) | 113 | 1 | 5 | 4.58 | . 943 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Mobile for personal use (hours per week) $(1=1-5,4=16+$ ) |  | 1 | 4 | 3.26 | 1.163 |
| Mobile for work use (1=strongly disagree, 5=strongly agree) | 113 | 1 | 4 | 1.87 | 1.236 |
| How often do you shop online ( $1=$ never, $5=$ daily) | 113 | 1 | 5 | 2.89 | . 920 |
| How often use credit or debit online ( $1=$ never, $5=$ daily ) | 113 | 1 | 5 | 4.06 | 1.020 |
| Prefer to shop online versus in store for retail ( $1=$ strongly disagree, 5=strongly agree) | 113 | 1 | 5 | 2.50 | 1.166 |
| Prefer to shop online versus in store for electronics | 113 | 1 | 5 | 2.85 | 1.297 |
| Prefer to shop online versus in store for luxury | 113 | 1 | 5 | 2.20 | 1.045 |
| Customer service when shopping online as I do in a brick and mortar store | 113 | 1 | 5 | 2.26 | . 989 |
| Greater flexibility to shop online versus in a brick and mortar store | 113 | 1 | 5 | 3.72 | 1.145 |
| E-promo would encourage a purchase online versus in store | 113 | 1 | 5 | 3.84 | 1.065 |
| I understand what the term customer loyalty means | 113 | 4 | 5 | 4.30 | . 461 |


| Loyal to certain retail brands | 113 | 1 | 5 | 3.95 | . 953 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Coupons do not sway my retail purchases | 113 | 1 | 5 | 2.81 | 1.308 |
| Price increase for retail brands | 113 | 1 | 5 | 3.17 | 1.164 |
| Loyal to certain electronic brands | 113 | 1 | 5 | 3.39 | 1.137 |
| Coupons do not sway electronic purchases | 113 | 1 | 5 | 2.64 | 1.134 |
| Price increase for electronic purchases | 113 | 1 | 5 | 2.70 | 1.117 |
| Loyal to certain luxury brands | 113 | 1 | 5 | 3.35 | 1.273 |
| Coupons do not sway luxury brands | 113 | 1 | 5 | 2.98 | 1.246 |
| Price increase for luxury | 113 | 1 | 5 | 2.69 | 1.188 |
| Value if dollar-off coupon | 113 | 2 | 5 | 4.27 | . 522 |
| Value if percent off coupon | 113 | 2 | 5 | 4.31 | . 536 |
| Value if coupon that provides free shipping | 113 | 2 | 5 | 4.39 | . 589 |
| More likely to use a coupon when it is a rich offer | 113 | 2 | 5 | 4.20 | . 629 |
| Do not like coupons with a threshold value attached | 113 | 1 | 5 | 3.81 | 1.106 |
| Familiar with concept of misredemption | 113 | 1 | 5 | 3.20 | 1.181 |


| Misredemption is fraud | 113 | 2 | 5 | 3.55 | . 813 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I search coupon codes online | 113 | 1 | 5 | 3.81 | 1.187 |
| Misredeemed knowingly online | 113 | 1 | 5 | 2.15 | . 947 |
| Misredeemed knowingly in store | 113 | 1 | 4 | 1.89 | . 712 |
| It is easier to abuse coupons online versus in stores | 113 | 1 | 5 | 3.40 | 1.082 |
| Internet makes it easy to misredeem coupons online | 113 | 1 | 5 | 3.36 | 1.102 |
| Coupon misredeem is a serious problem | 113 | 1 | 5 | 3.65 | . 874 |
| Receive too many coupons | 113 | 1 | 5 | 3.78 | . 989 |
| Do not make retail purchase w/o coupons | 113 | 1 | 5 | 3.51 | 1.070 |
| Do not make electronic purchase without coupons | 113 | 1 | 5 | 3.32 | 1.080 |
| Do not make luxury purchase without coupons | 113 | 1 | 5 | 3.06 | 1.152 |
| Do not value all coupons equally because of coupon clutter | 113 | 1 | 5 | 3.32 | 1.088 |
| Valid N | 113 |  |  |  |  |

Table 13 Table 1. Listing the basic descriptive statistics of scaled research variables.
A. Gender.

| Gender | Frequency | Percent | Valid Percent | Cumulative Percent |
| :--- | :--- | :--- | :--- | :--- |
| male | 47 | 41.6 | 41.6 | 41.6 |
| female | 66 | 58.4 | 58.4 | 100.0 |
| Total | 113 | 100.0 | 100.0 |  |

B. Highest education level.

| Level | Frequency | Percent | Valid Percent | Cumulative Percent |
| :--- | :--- | :--- | :--- | :--- |
| high school | 5 | 4.4 | 4.4 | 4.4 |
| associates | 7 | 6.2 | 6.2 | 10.6 |
| bachelors | 65 | 57.5 | 57.5 | 68.1 |
| masters | 28 | 24.8 | 24.8 | 92.9 |
| masters+ | 8 | 7.1 | 7.1 | 100.0 |
| Total | 113 | 100.0 | 100.0 |  |

C. Age range (yrs).

| Range | Frequency | Percent | Valid Percent | Cumulative Percent |
| :--- | :--- | :--- | :--- | :--- |
| 18 to 25 | 19 | 16.8 | 16.8 | 16.8 |
| 26 to 30 | 31 | 27.4 | 27.4 | 44.2 |
| 31 to 35 | 21 | 18.6 | 18.6 | 62.8 |
| 36 to 40 | 8 | 7.1 | 7.1 | 69.9 |
| 41 to 45 | 6 | 5.3 | 5.3 | 75.2 |
| 46 to 50 | 13 | 11.5 | 11.5 | 86.7 |
| $50+$ | 15 | 13.3 | 13.3 | 100.0 |
| Total | 113 | 100.0 | 100.0 |  |
| D. Annual income (US\$) |  |  |  |  |


| Level | Frequency | Percent | Valid Percent Cumulative Percent |  |
| :--- | :--- | :--- | :--- | :--- |
| below 20 K | 1 | .9 | .9 | .9 |
| 20,001 to 30,000 | 4 | 3.5 | 3.5 | 4.4 |
| 30,001 to 40,000 | 27 | 23.9 | 23.9 | 28.3 |
| 40,001 to 50,000 | 37 | 32.7 | 32.7 | 61.1 |
| 50,001 to 60,000 | 13 | 11.5 | 11.5 | 72.6 |
| 60,001 to 75,000 | 16 | 14.2 | 14.2 | 86.7 |


| $75,000+$ | 15 | 13.3 | 13.3 | 100.0 |
| :--- | :--- | :--- | :--- | :--- |
| Total | 113 | 100.0 | 100.0 |  |

Table 14 Frequencies of non-scaled or nominal variables.

### 4.2 Specific Research Hypothesis-testing Results

### 4.2.1 Specific research hypothesis 1 (H1)

H1: Customers consider themselves loyal customers but will change their purchase habits for retail and electronic goods due to an e-coupon offer. The purchase of luxury goods will remain unaffected by e-coupon offers.

The first hypothesis suggests that customers will consider themselves loyal to certain retail (e.g., clothing and accessory purchases) and electronic brands, but may change their purchase habits due to an e-coupon offer, regardless of gender (Figure 3). As a corollary, it is hypothesized that the purchase of luxury goods will remain relatively unaffected by e-coupon offers. As demonstrated in Figure 3, there was strong support for loyalty among customers for retail and electronic brands, but a lesser extent for luxury purchases, as expected, with the promotes of ecoupons. It was found that 92 respondents said they agreed or strongly agreed that they were loyal to certain retail brands. However, 48 out of the 92 , or $52.2 \%$ of the respondents, said that coupons would sway their purchase decisions.
A. Loyalty to retail brands.

B. Loyalty to electronic brands.

C. Loyalty to luxury brands.


Figure 8 Relationships among the impacts of e-coupons with loyalty among customers as a function of gender.

An inspection of Figure 2 reveals that the respondent's loyalty is to primarily electronic brands, as 72 respondents agreed or strongly agreed that they were loyal to certain electronic brand. However, $58.34 \%$ stated that e-coupons would sway their purchase decisions. Again, these findings support H1. Interestingly, 69 respondents agreed or strongly agreed that they were loyal to certain luxury brands, but $72.47 \%$, or 50 out of the 69 respondents, said that e-coupons would not sway their purchase decisions for luxury brands. This result also supports H1.

As demonstrated in Table 3, a highly significant relationship existed among loyal to certain retail brands and a selected set of e-coupon promotional independent variables ( $\mathrm{F}=8.371, \mathrm{p}<.001$ ) and suggest a positive relation with price increase for retail brands $(t=3.008, p=.003)$. The same basic analysis was performed for loyal to certain electronic brands in Table 4 ( $\mathrm{F}=9.627$, p $<.001$ ) and suggest a positive relation with price increase for electronic purchases ( $\mathrm{t}=6.700, \mathrm{p}=$ $<.001$ ) and coupons do not sway luxury brands ( $\mathrm{t}=3.920, \mathrm{p}=<.001$ ), with negative relationship with price increase for luxury $(\mathrm{t}=-4.630, \mathrm{p}=<.001)$. Table 5 presents the same analysis with loyal to certain luxury brands as the dependent variable ( $\mathrm{F}=13.114, \mathrm{p}=<.001$ ), coupons do not sway luxury brands $(\mathrm{t}=3.672, \mathrm{p}=<.001)$ and price increase for luxury $(\mathrm{t}=-3.412, \mathrm{p}=<.001)$. With the multiple linear regression, analysis yielded relatively high-explained variances found in Tables 3 through 5, model summary statistics. Hence, H1, suggesting that customers will consider themselves loyal to certain retail and electronic brands, but may change their purchase habits due to an e-coupon offer, regardless of gender, was supported.
A. Model summary.

| R | R Square | Adjusted R Square | Std. Error of the Estimate |
| :--- | :--- | :--- | :--- |
| .650 | .422 | .372 | .755 |

B. ANOVA results.

| Source of Variation | Sum of Squares | df | Mean Square | F-ratio | Sig. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Regression | 42.955 | 9 | 4.773 | 8.371 | $<.001$ (HS) |
| Residual | 58.726 | 103 | .570 |  |  |
| Total | 101.681 | 112 |  |  |  |

Dependent Variable: Loyal to certain retail brands.

Predictors: (Constant), Value if coupon that provides free shipping; Coupons do not sway electronic purchases; Price increase for luxury; Value if percent off coupon; Price increase for retail brands; Coupons do not sway luxury brands; Coupons do not sway my retail purchases; Price increase for electronic purchases; Value if dollar-off coupon. HS denotes highly significant at the .01 level for a two-tailed test.
C. Hypothesis-testing of coefficients.

|  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Independent Variables | B | Std. Error | Beta | t-test | Sig. |
| (Constant) | 2.382 | .710 |  | 3.355 | $<.001$ |
| Coupons do not sway my retail <br> purchases | .163 | .087 | .224 | 1.873 | $.064(\mathrm{NS})$ |


| Price increase for retail brands | .277 | .092 | .338 | 3.008 | .003 (HS) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Coupons do not sway electronic -.030 <br> purchases | .103 | -.036 | -.291 | .771 (NS) |  |
| Price increase for electronic <br> purchases | .009 | .103 | .011 | .089 | .929 (NS) |
| Coupons do not sway luxury <br> brands | .230 | .086 | .301 | 2.673 | .009 (HS) |
| Price increase for luxury | -.177 | .095 | -.220 | -1.855 | .067 (NS) |
| Value if dollar-off coupon <br> Value if percent off coupon | -.527 | .335 | -.288 | -1.571 | .119 (NS) |
| Value if coupon that provides <br> free shipping | .124 | .321 | .232 | 1.287 | .201 (NS) |

Dependent Variable: Loyal to certain retail brands. NS denotes not statistically significant at the .05 level for a two-tailed test; S denotes significant at the .01 level for a two-tailed test; HS denotes highly significant at the .01 level for a two-tailed test.

Table 15 Relevant Statistics Associated with Specific Hypothesis-Testing Results (H1). Part A displays the model summary, Part B inspects specific contributions of each component in the hypothesis (Dependent variable: Loyal to certain retail brands).
A. Model summary.

| R | R Square | Adjusted R Square | Std. Error of the Estimate |
| :--- | :--- | :--- | :--- |
| $.676^{\mathrm{a}}$ | .457 | .409 | .874 |

B. ANOVA results.

| Source of Variation | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Regression | 66.186 | 9 | 7.354 | 9.627 | $<.001(\mathrm{HS})$ |
| Residual | 78.681 | 103 | .764 |  |  |
| Total | 144.867 | 112 |  |  |  |

Dependent Variable: Loyal to certain electronic brands.

Predictors: Value if coupon that provides free shipping; Coupons do not sway electronic purchases; Price increase for luxury; Value if percent off coupon; Price increase for retail brands; Coupons do not sway luxury brands; Coupons do not sway my retail purchases; Price increase for electronic purchases; Value if dollar-off coupon. HS denotes highly significant at the .01 level for a two-tailed test.
C. Hypothesis-testing of Coefficients.

|  | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Independent Variable | B | Std. Error | Beta | t-test | Sig. |
| (Constant) | 1.852 | .822 |  | 2.254 | .026 |
| Coupons do not sway my retail <br> purchases | .100 | .101 | .115 | .992 | .324 (NS) |
| Price increase for retail brands | -.016 | .106 | -.016 | -.149 | .882 (NS) |
| Coupons do not sway electronic <br> purchases | -.169 | .119 | -.169 | -1.418 | .159 (NS) |
| Price increase for electronic <br> purchases | .801 | .120 | .787 | 6.700 | $<.001$ (HS) |


| Coupons do not sway luxury <br> brands | .391 | .100 | .428 | 3.920 | $<.001(\mathrm{HS})$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Price increase for luxury | -.510 | .110 | -.533 | -4.630 | $<.001(\mathrm{HS})$ |
| Value if dollar-off coupon | -.273 | .388 | -.125 | -.704 | .483 (NS) |
| Value if percent off coupon | .211 | .372 | .100 | .569 | $.571(\mathrm{NS})$ |
| Value if coupon that provides <br> free shipping | .012 | .175 | .006 | .072 | .943 (NS) |

Dependent Variable: Loyal to certain electronic brands. NS denotes not statistically significant at the .05 level for a two-tailed test; HS denotes highly significant at the .01 level for a two-tailed test.

Table 16 Relevant Statistics Associated with Specific Hypothesis-Testing Results (H1). Part A displays the model summary, Part B inspects specific contributions of each component in the hypothesis (Dependent variable: Loyal to certain electronic brands).
A. Model summary.

| R | R Square | Adjusted R Square | Std. Error of the Estimate |
| :--- | :--- | :--- | :--- |
| .731 | .534 | .493 | .906 |

B. ANOVA results.

| Source of Variation | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Regression | 96.940 | 9 | 10.771 | 13.114 | $<.001$ (HS) |
| Residual | 84.600 | 103 | .821 |  |  |
| Total | 181.540 | 112 |  |  |  |

Dependent Variable: Loyal to certain luxury brands.

Predictors: (Constant), Value if coupon that provides free shipping; Coupons do not sway electronic purchases; Price increase for luxury; Value if percent off coupon; Price increase for retail brands; Coupons do not sway luxury brands; Coupons do not sway my retail purchases; Price increase for electronic purchases; Value if dollar-off coupon. HS denotes highly significant at the .01 level for a two-tailed test.
C. Hypothesis-testing of Coefficients.

|  | Unstandardized <br> Coefficients |  |  | Standardized <br> Coefficients |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Independent Variables | B | Std. Error | Beta | t-test | Sig. |
| (Constant) | 1.984 | .852 |  | 2.328 | .022 |
| Coupons do not sway my retail <br> purchases | .169 | .104 | .174 | 1.618 | .109 (NS) |
| Price increase for retail brands | -.017 | .110 | -.015 | -.151 | .880 (NS) |
| Coupons do not sway electronic <br> purchases | -.085 | .124 | -.076 | -.689 | .492 (NS) |
| Price increase for electronic <br> purchases | -.243 | .124 | -.213 | -1.962 | .052 (S) |
| Coupons do not sway luxury <br> brands | .380 | .103 | .372 | 3.672 | $<.001$ (HS) |
| Price increase for luxury | .390 | .114 | .364 | 3.412 | $<.001$ (HS) |
| Value if dollar-off coupon | -.702 | .402 | -.288 | -1.745 | .084 (NS) |
| Value if percent off coupon | .159 | .386 | .067 | .412 | .681 (NS) |


| Value if coupon that provides <br> free shipping | .446 | .181 | .206 | 2.463 | .015 (NS) |
| :--- | :--- | :--- | :--- | :--- | :--- |

Dependent Variable: Loyal to certain luxury brands. NS denotes not statistically significant at the .05 level for a two-tailed test; S denotes significant at the .01 level for a two-tailed test; HS denotes highly significant at the .01 level for a two-tailed test.

Table 17 Relevant Statistics Associated with Specific Hypothesis-Testing Results (H1). Part A displays the model summary, Part B inspects specific contributions of each component in the hypothesis (Dependent variable: Loyal to certain luxury brands).

### 4.2.2 Specific research hypothesis 2 (H2)

H2: Customers dislike e-coupons with threshold values regardless of their annual income.
The second hypothesis, H2, states that customers generally dislike e-coupons with threshold values attached to them, regardless of the respondent's annual income for both genders. There are no expected differences among males and females concerning their distrust or dislike of threshold e-coupons. Figure 4 and Table 6 below illustrate the findings of this hypothesis. The cross-tabulation statistics associated with annual income, e-coupons with threshold values and gender illustrates that $77 \%$ of those surveyed, or 87 out of 113 respondents, agree or strongly agree that they do not like e-coupons with threshold values (male Chi-square $=20.459, \mathrm{p}=.200$; female Chi-square $=21.1149, p=.632$ ). Moreover, this finding was independent of annual income level. Therefore, H 2 was accepted in the null form, as expected. The negative reaction to e-coupons that require a threshold amount may be to the perception that customers are required to spend more to redeem the coupon. This is a serious aspect to marketers, as by definition, customers who are using coupons are generally cost-conscious and typically resent strategies designed to cause them to spend more money.


Figure 9 E-coupons with threshold values as a function of gender and annual income (US\$).
A. Actual count.

| Gender |  |  | Do not like coupons with a threshold value attached |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | strongly disagree | disagree | neutral | agree | strongly agree |  |
| male | Annual income level | $\begin{aligned} & 30,001 \text { to } \\ & 40,000 \end{aligned}$ | 0 | 2 | 0 | 7 | 2 | 11 |
|  |  | $\begin{aligned} & 40,001 \text { to } \\ & 50,000 \end{aligned}$ | 0 | 2 | 0 | 4 | 8 | 14 |


|  |  | $\begin{aligned} & 50,001 \text { to } \\ & 60,000 \end{aligned}$ | 0 | 2 | 0 | 2 | 1 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & 60,001 \text { to } \\ & 75,000 \end{aligned}$ | 2 | 1 | 1 | 5 | 1 | 10 |
|  |  | 75,000+ | 0 | 2 | 0 | 3 | 2 | 7 |
|  | Total |  | 2 | 9 | 1 | 21 | 14 | 47 |
| female | Annual income level | below 20K | 0 | 0 | 0 | 1 | 0 | 1 |
|  |  | $\begin{aligned} & 20,001 \text { to } \\ & 30,000 \end{aligned}$ | 0 | 1 | 0 | 1 | 2 | 4 |
|  |  | $\begin{aligned} & 30,001 \text { to } \\ & 40,000 \end{aligned}$ | 1 | 5 | 0 | 6 | 4 | 16 |
|  |  | $\begin{aligned} & 40,001 \text { to } \\ & 50,000 \end{aligned}$ | 0 | 4 | 0 | 12 | 7 | 23 |
|  |  | $\begin{aligned} & 50,001 \text { to } \\ & 60,000 \end{aligned}$ | 0 | 0 | 0 | 6 | 2 | 8 |
|  |  | $\begin{aligned} & 60,001 \text { to } \\ & 75,000 \end{aligned}$ | 0 | 1 | 1 | 3 | 1 | 6 |
|  |  | 75,000+ | 0 | 0 | 1 | 6 | 1 | 8 |
|  | Total |  | 1 | 11 | 2 | 35 | 17 | 66 |
| Total | Annual income level | below 20K | 0 | 0 | 0 | 1 | 0 | 1 |
|  |  | $\begin{aligned} & 20,001 \text { to } \\ & 30,000 \end{aligned}$ | 0 | 1 | 0 | 1 | 2 | 4 |

$\left.\begin{array}{ll|l|l|l|l|l|l}\hline \begin{array}{l}30,001 \text { to } \\ 40,000\end{array} & 1\end{array}\right)$
B. Chi-square tests results.

| Gender |  | Value | df | Asymptotic Significance (2sided) |
| :---: | :---: | :---: | :---: | :---: |
| male | Pearson Chi-Square | $20.459^{\text {b }}$ | 16 | . 200 (NS) |
|  | Likelihood Ratio | 18.262 | 16 | . 309 (NS) |
|  | Linear-by-Linear Association | 1.634 | 1 | . 201 (NS) |
|  | N of Valid Cases | 47 |  |  |
| female | Pearson Chi-Square | $21.114^{\text {c }}$ | 24 | . 632 (NS) |
|  | Likelihood Ratio | 22.011 | 24 | . 579 (NS) |
|  | Linear-by-Linear Association | . 601 | 1 | . 438 (NS) |


|  | N of Valid Cases | 66 |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Total | Pearson Chi-Square | $25.870^{\mathrm{a}}$ | 24 | $.360(\mathrm{NS})$ |
|  | Likelihood Ratio | 24.286 | 24 | $.445(\mathrm{NS})$ |
|  | Linear-by-Linear Association | .137 | 1 | $.712(\mathrm{NS})$ |

Note: a. 27 cells ( $77.1 \%$ ) have expected count less than 5 . The minimum expected count is .03 ; b. 24 cells ( $96.0 \%$ ) have expected count less than 5 . The minimum expected count is .11 ; c. 32 cells ( $91.4 \%$ ) have expected count less than 5 . The minimum expected count is .02 . NS denotes not statistically significant at the .05 level for a two-tailed test.

Table 18 Cross-tabulation statistics associated with annual income, e-coupons with threshold values and gender.

### 4.2.3 Specific research hypothesis 3 (H3)

H3: Customers consider coupon misredemption fraud and feel that it is an issue for businesses but consumers will continue to search for coupon codes online.

The final hypothesis, H3, addresses coupon misredemption. The intent of this hypothesis is to test whether or not customers consider it fraud, but continue to search for e-coupon codes online. As illustrated in Figures 5 and 6, 73 out of 113 respondents, or $64.61 \%$, agree or strongly agree collectively that coupon misredemption is legally considered fraud. Likewise, 79 out of 113 respondents, or $69.92 \%$, collectively agree or strongly agree that coupon misredemption is a serious issue for businesses to solve. Fraud control plays a substantial role making a company prosperous through customer loyalty (Smith, 2008, 2010). It enables customers the confidence to return form their product or service and creates the possibility for new potential customers. Increased confidence should allow for higher pricing for their products, service because they trust the firm's name, and give them the higher levels of satisfaction when interaction occurs.


Figure 10 Misredemption is fraud as a function of gender.


Figure 11 Misredemption is a serious issue for businesses as a function of gender.

Table 7 below shows the output from a multiple linear regression analysis. The results of the hypothesis testing, with "misredemption is fraud" as the dependent variable and 11 independent variables related to fraud, and the use of e-coupons, show that there is a significant predictive relationship. The adjusted explained variance is $30.9 \%$ and found to be highly significant ( $\mathrm{F}=$ 5.557, $\mathrm{p}<.001$ ). Specifically, the following variables were found to positively related to the dependent variable: Misredeem knowingly online ( $t=2.687, p=.008$ ), coupon misredemption is a serious problem ( $\mathrm{t}=3.160, \mathrm{p}=.002$ ), and do not make retail purchase without coupons $(\mathrm{t}=$ $3.733, \mathrm{p}<.001$ ). The following variables were found to be dependent related to the dependent variable: It is easier to abuse coupons online versus in stores $(t=-3.016, p=.003)$ and receive too many coupons $(t=-2.178,=.032)$. It is obvious that many of the respondents consider misredemption as fraud and a serious problem. They seem not to agree on the following: it is easier to abuse coupons online versus in stores; they receive too many coupons. Although other factors were found to be statistically significant, it appears that whether or not customers consider coupon misredemption fraud or consider it a serious business issue has no relationship on searching for coupon codes online. Therefore, as hypothesized, H3 was formally accepted in the null form, as expected.
A. Model summary.

| R | R Square | Adjusted R Square |
| :--- | :--- | :--- |
| 614 | .377 | .309 |

B. ANOVA results.

| Source of Variation | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Regression | 27.893 | 11 | 2.536 | 5.557 | $<.001$ (HS) |
| Residual | 46.089 | 101 | .456 |  |  |
| Total | 73.982 | 112 |  |  |  |

[^0]Predictors: Do not value all coupons equally because of coupon clutter; It is easier to abuse coupons online versus in stores; Do not make luxury purchase w/o coupons; Misredeemed knowingly in store; I search coupon codes online; Coupon misredeem is a serious problem; Receive too many coupons; Do not make retail purchase without coupons; Misredeemed knowingly online; Do not make electronic purchase without coupons; Internet makes it easy to misredeem coupons online. HS denotes highly significant at the .01 level for a two-tailed test.
C. Hypothesis-testing of coefficients.

| Independent Variables | Unstandardized Coefficients |  | Standardized Coefficients <br> Beta | t-test | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | B | Std. Error |  |  |  |
| (Constant) | 2.308 | . 505 |  | 4.573 | <. 001 |
| I search coupon codes online | . 040 | . 060 | . 059 | . 674 | . 502 (NS) |
| Misredeemed knowingly online | . 296 | . 110 | . 345 | 2.687 | . 008 (HS) |
| Misredeemed knowingly in store | -. 086 | . 113 | -. 075 | -. 762 | . 448 (NS) |
| It is easier to abuse coupons online versus in stores | -. 359 | . 119 | -. 478 | -3.016 | . 003 (HS) |
| Internet makes it easy to misredeem coupons online | . 204 | . 129 | . 277 | 1.579 | . 117 (NS) |
| Coupon misredeem is a serious problem | . 272 | . 086 | . 292 | 3.160 | . 002 (HS) |
| Receive too many coupons | -. 177 | . 081 | -. 216 | -2.178 | . 032 (S) |
| Do not make retail purchase w/o coupons | . 285 | . 076 | . 376 | 3.733 | <. 001 (HS) |


| Do not make electronic purchase <br> without coupons | -.037 | .111 | -.049 | -.336 | .737 (NS) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Do not make luxury purchase <br> without coupons | .024 | .091 | .034 | .261 | .795 (NS) |
| Do not value all coupons equally <br> because of coupon clutter | -.038 | .068 | -.052 | -.565 | .573 (NS) |

Dependent Variable: Misredemption is fraud. NS denotes not statistically significant at the .05 level for a two-tailed test; S denotes significant at the .01 level for a two-tailed test; HS denotes highly significant at the .01 level for a two-tailed test.

Table 19 Relevant Statistics Associated with Specific Hypothesis-Testing Results (H3). Part A displays the model summary, Part B inspects specific contributions of each component in the hypothesis (Dependent variable: Misredemption is fraud).

### 5.0 DISCUSSION

### 5.1 Managerial Implications

There as several strategic insights that may be inferred, based on the statistical analysis completed for this research study. It is necessary to provide an interpretation of these findings to senior management so they can work to refine their e-coupon strategy as part of the company's overall marketing strategy. First, and foremost, customer loyalty is integral for all B2C retailers. The first hypothesis tested the loyalty of retail, electronic and luxury brand purchasers. Retailers specifically in the retail and electronic sectors need to work to create and nurture a loyal customer base. If not, this could result in the loss of customers, loss of sales and profits for the retailer. This is a serious business implication because the cost of acquiring a new customer is five times more expensive than retaining an existing customer.

Secondly, retailers implementing e-coupons as part of their overall marketing strategy should try to limit the use of threshold values on the coupons. The second hypothesis showed that customers, independent of their annual income, dislike e-coupons with threshold values. Thus, the expected outcome is the loss of redemption. If customers do not like the coupon, they are not likely to redeem. Ultimately, the retailer is losing money because it costs money to implement the e-coupon campaign and there is a loss of potential sales and revenue from redeeming the coupon.

Managers should be very concerned with coupon misredemption. Based on the analysis provided by testing the third hypothesis, $64.61 \%$ of respondents consider misredemption fraud. However, further analysis shows that customers continue to search for coupon codes online.

Retailers should become aware of the Coupon Information Corporation (CIC) and understand how this not-for-profit organization can help them fight coupon misredemption. This phenomenon has serious implications for retailers as well. It is estimated that retailers lose hundreds of millions of dollars annually to coupon misredemption. Actions need to be taken to mitigate this risk for retailers.

### 5.2 Future Research Directions

The finding of user interface quality perception that directly impacts customer satisfaction and trust is interesting. It is consistent with what we have learned about e-commerce principles. The design elements of the customer interface including context, commerce, and connection, as well as content, communication and customization could potentially improve customers' perceptions about the site. For example, there several apparent reasons that may drive potential customers to frequently use merchandisers to promote online shopping. First, many customers may be satisfied with the website if they have options that allow users to personalize both buyer and seller accounts. It enables users to look confidently at their shopping cart, view, modify and Track or cancel orders, but allows service and product providers to attract, tailor and customize products that their customers have demonstrated an interest in viewing and/or purchasing. Retailers may gain users' trust by offering several security levels for account management, especially ensuring a secure the checkout procedures. Based on the features that promote user friendly and security options that retailers may offer online, initially attracted by e-coupons, positive consumer experiences should be significantly strengthened.

It is important that the design of websites that reflect culture values has a strong impact on customer trust, satisfaction and loyalty. Some of the respondents commented in open-ended questions that may be useful in future studies on e-coupons and their effectiveness. For example, one respondent commented on receiving an e-coupon form a company's product unknown to the individual:

While I visit any e-commerce site that I never have been, the first thing that I want to read is the "About" section. It allows me to know what the business stands for. My personal preference and culture values instinct lead me to determine whether I could trust the site. The "contact me" section provides the discernment to assess whether I will be satisfied by its services as I communicate with the other person online. Additionally, I may elect to re-visit the site if the prices of goods or services may meet my values.

Essentially, future studies may find it useful to include more insights on the sampled consumers as demographic differences could result in different perceptions toward customer satisfaction, trust, and loyalty.

### 6.0 Conclusion

### 6.1 Summary

The present research effort has provided at least some insight to the reasons to why marketers prefer e-coupons as a strategy of first choice in promoting brand awareness and ultimately attracting/retaining customers. A number of basic marketing concepts and/or issues were discussed to document the growth and acceptance of e-coupons, including tenants of CRM, historical evaluation of e-coupons, branding forces that drive management to utilize e-coupons in the B2C marketplace, as well as some important factors that affect both customers and retailers when implementing e-coupons. The rationale for this analysis may be due to that, retailers are increasing their use of e-coupons within the B2C marketplace because of economic pressures and more cost conscious customers ("Online 'coupon clickers' ...," 2008). Moreover, some retailers may be leveraging online only coupons to increase online sales.

### 6.2 General Conclusions

This study attempts to determine the impact of B2C e-coupons on customer loyalty, price sensitivity, misredemption and coupon clutter. Based on the analysis, all three hypotheses were able to be accepted. A variety of recommendations were provided to enable managers to better plan and implement an effective e-coupon campaign as part of a retailers marketing strategy. New technologies, specifically mobile technology, will force retailers to be nimble and adapt their e-coupon strategies to accommodate a more mobile, tech savvy customer base.

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Keywords: B2C, consumer fraud, customer relationship management (CRM), e-commerce, ecoupons, promotions, customer loyalty, customer satisfaction, price sensitivity, misredemption.

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[^0]:    Dependent Variable: Misredemption is fraud.

