Factors Influencing Impulse Buying During an Online Purchase Transaction

by Rebecca Hodge

A thesis

presented to the University of Waterloo

in fulfillment of the

thesis requirement for the degree of

Master of Applied Science

in

Management Sciences

Waterloo, Ontario, Canada, 2004

© Rebecca Hodge, 2004

I hereby declare that I am the sole author of this thesis.

This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

An important element in retailing is the use of impulse purchases; generally small items that are bought by consumers on the spur of the moment. By some estimates, impulse purchases make up approximately 50 percent of all spending by consumers. While impulse purchases have been studied in the brick-and-mortar retail environment, they have not been researched in the online retail environment. With e-commerce growing rapidly and approaching \$20 billion per year in the Canadian and US markets, this is an important unexplored area.

Using real purchasing behaviour from visitors to the Reunion website of Huntsville High School in Ontario Canada, I explored factors that influence the likelihood of an impulse purchase in an online retail environment. Consistent with diminishing sensitivity (mental accounting and the psychophysics of pricing), the results indicate that the likelihood of a consumer purchasing the impulse item increases with the total amount spent on other items. The results also show that presenting the offer in a popup is a more effective location and presentation mode than embedding the offer into the checkout page and increases the likelihood of the consumer making an impulse purchase. In addition, the results confirm that providing a reason to purchase by linking a \$1 donation for a charity to the impulse item increases the frequency of the impulse purchase.

Acknowledgements

Thank you to Dr. Scott Jeffrey for his contagious enthusiasm of mental accounting, decision-making and research that demonstrates and explains the irrational behaviour of consumers. I have thoroughly enjoyed learning new concepts and applying them to my favourite subjects: shopping and the Internet.

Thank you to the Huntsville High School (HHS) 100th Reunion Committee, Mike Greaves and Colleen Hannigan for allowing me to collect the data required for this research on the HHS Reunion website and for their complete cooperation throughout the design and data collection period. Without their support, this research would not have been possible.

Thank you to my readers, Dr. R. McNaughton and Dr. R. Sundarraj for their time to review my work and their constructive feedback.

Thank you to my Mom, Dad and brother Joel for their support throughout this program. Special thanks to Jeremy for taking on additional responsibility at e-xyn with diligence and a smile.

Thank you to Robert for wholeheartedly supporting my decisions, for providing distractions to keep life balanced throughout the program, and for giving me time to focus when I needed to.

Finally, thanks to Lisa who encouraged me to study at the library where we could be free of distraction, was always available to engage in thought-provoking discussions and ensured my nutritional intake was never sacrificed.

Table of Contents

CHAPTE	R 1 INTRODUCTION	.1
CHAPTEI	R 2 IMPULSE BUYING	.5
2.1	Categories of Impulse Purchases	.9
2.2	Factors that Influence Impulse Buying in Brick-and-Mortar Stores .	14
2.3	Online Impulse Buying	20
2.3.	1 Focus of This Research	27
СНАРТЕ	R 3 THEORY	30
3.1	Responsiveness to Money Spent.	30
3.2	Mode of Presentation	38
3.3	Reason to Purchase	41
СНАРТЕ	R 4 RESEARCH DESIGN METHOD	46
4.1	Manipulations	50
СНАРТЕ	R 5 RESULTS & DISCUSSION	52
5.1	Responsiveness to Money Spent	53
5.2	Mode of Presentation & Reason to Purchase	57
CHAPTEI	R 6 SUMMARY	62
6.1	Advantages of the Online Environment	63

6.2	Limitations & Future Work	66	
6.3	Conclusions	68	
REFERENCES69			
APPENI	OIX A – Huntsville High School Reunion Index Page	72	
APPENI	OIX B – Demographic Survey	73	
APPENI	OIX C –HHS Reunion Checkout Page Condition #1	76	
APPENI	OIX D – HHS Reunion Checkout Page Condition #2	77	
APPENI	OIX E – HHS Reunion Checkout Page Condition #3	78	
APPENI	DIX F – HHS Reunion Checkout Page Condition #4	79	

CHAPTER 1 INTRODUCTION

"Impulse purchase" or "impulse buying" describes any purchase which a shopper makes but has not planned in advance (Baumeister, 2002; Stern, 1962). Between 1945 and 1959 unplanned purchases went from accounting for 38.2 percent of the total purchase to 50.9 percent of the total purchase in supermarkets (Stern, 1962). In the late 1970s impulse purchases accounted for between 27 and 62 percent of purchases in department stores (Bellenger & Robertson, 1978). More recently, Annie Seeley, a Food Commission nutritionist stated that "seventy percent of confectionary is bought on impulse" (Marketing Week, 2003, p. 23). With personal expenditures in the Canadian economy totaling \$656 billion in 2001 (Jonathan Ellison, 2003), impulse purchases account for a significant portion of sales which confirms that impulse buying is an important topic to both retailers and the retail industry.

Marketers and retailers recognized the significance of impulse buying in brick-and-mortar stores many years ago, and have used various psychological strategies and techniques to increase sales. In order to encourage and elicit an impulse purchase, brick-and-mortar stores position point-of-sale displays at the checkout, know the optimal location of product placement on shelves, and understand how to bundle products to appeal to customers. In grocery stores,

retailers strategically place low-cost hedonic items¹, such as gum, candy and magazines at the checkout. McDonald's has been capitalizing on impulse buying for decades through bundling products by instructing cashiers to ask, "Would you like an apple pie with that?" after the customer has ordered a burger, pop and fries.

Brick-and-mortar stores are no longer the only retail sales channel. With the advent of the World Wide Web and the development of the technology to allow the user to interact and communicate with a website, online stores are emerging and having an increasing impact on the retail market. By 2005, the World Wide Web is expected to grow by a factor of 20; to 200 million sites (Palmer, 2002), and 50 billion pages (Nielsen, 2000). In 1999, 6.9 percent of Canadian households (806 thousand households) placed 3.3 million orders and in 2001, 2.8 million Canadian households placed 16.6 million orders (J. Ellison, Earl, & Ogg, 2001). The total dollar value of business-to-consumer sales of Canadian firms has increased steadily from 1.4 billion in 2000 to 2.3 billion in 2001 (Tol, 2002) to \$3.7 billion in 2002 (Tol, 2003) to \$5.5 billion in 2003 (Tol, 2004), representing a compound annual growth rate of 58 percent. This trend is similar in the US economy where online sales increased from \$5 billion in 1999

_

¹ Hedonic items are products associated with pleasurable experiences (Dhar & Wertenbroch, 2000)

to over \$13 billion in 2002 (Commerce, 2003). These increases are expected to continue as shoppers learn to trust the Internet and online vendors, recognize the time-saving benefits and convenience of buying online, and source products they want at competitive prices.

If the online retailer understood factors that encourage impulse purchases online, even a 1 percent increase in sales from impulse buying would lead to an additional \$55 million in revenue, resulting in a significant impact to both the online retailer and the industry. With such a lucrative opportunity available to online retailers it is difficult to understand why no rigorous research in this field exists.

For decades, researchers have studied impulse buying in brick-and-mortar stores in order to determine effective techniques and identify influential factors that increase the likelihood of impulse purchases (Bayley & Nancarrow, 1998; Cobb & Hoyer, 1986; Iyer, 1989; Jones, Reynolds, Weun, & Beatty, 2003; Kollat & Willet, 1967; Phillips & Bradshaw, 1993; Verplanken & Herabadi, 2001). Since online retail has many fundamental characteristics in common with brick-and-mortar retail, it follows that online retail should be able to take advantage of impulse purchases to increase sales in a magnitude similar to the brick-and-mortar retail industry (J. Lee, Podlaseck, Schonberg, & Hoch, 2001). This strategy could result in a significant increase in gross sales and profit in the large and growing e-commerce sales channel.

This study will explore conditions that encourage shoppers to add items incrementally to a purchase during a real online purchase transaction at the Huntsville High School 100th Reunion website; a live e-commerce site. Three factors will be considered that could contribute to a decision to purchase: the dollar amount spent on the site, the mode of presentation of the offer and the inclusion of a reason to purchase the impulse item. Consumers will be offered an additional purchase opportunity (add-on) during the checkout process which will determine whether or not any correlation exists between the factors being studied and the likelihood of accepting the add-on or impulse purchase.

This research is the first step in applying impulse buying merchandising strategies from the brick-and-mortar store to the online retail environment.

Results from this study will assist online retailers to understand how known and researched brick-and-mortar merchandising strategies can be transferred to the online environment and assist online retailers to implement such merchandising techniques to increase sales and profits through impulse buying.

CHAPTER 2 IMPULSE BUYING

Stern (1962) indicates that impulse buying is synonymous with "unplanned buying" and defines it as "any purchase which a shopper makes but has not planned in advance." This definition is fairly consistent among other impulse purchasing literature (Cobb & Hoyer, 1986; Kollat & Willet, 1967). More recently, researchers have extended this definition beyond a simple unplanned purchase to include an emotional element or an urge to make the purchase. Rook (1987, p. 191) defined impulse buying as "when a consumer experiences a sudden, often powerful and persistent urge to buy something immediately." Beatty and Ferrell (1998, p. 170) extended Rook's definition of impulse buying to

"a sudden and immediate purchase with no pre-shopping intentions either to buy the specific product category or to fulfill a specific buying task. The behaviour occurs after experiencing an urge to buy and it tends to be spontaneous and without a lot of reflection (i.e. it is "impulsive"). It does not include the purchase of a simple reminder item, which is an item that is simply out-of-stock at home."

Piron (1991) conducted a thorough survey of impulse purchasing literature and proposed a more specific and comprehensive definition for impulse buying that includes four components: it is unplanned, it the result of an exposure to stimulus, it is decided "on-the-spot", and it involves an emotional and/or cognitive reaction. This is the working definition that will be used for

this study. In this paper, the terms "impulse buying" and "impulse purchase" are used interchangeably.

Impulse purchases represent a significant portion of sales in the brickand-mortar retail environment. In the early 1960s the Film Division at the DuPont Company completed a comprehensive study of impulse buying where shoppers entering a grocery store were surveyed and asked what they intended to buy. As the shoppers exited the store, they were surveyed again and the interviewer recorded the actual purchases made. The purchases in the cart that were not recorded (intended) when the shopper entered the store were considered impulse purchases. The results of this study indicated that 38.2 percent to 50 percent of the products in the cart were impulse purchases. These results are typical of impulse purchases in the brick-and-mortar retail environment and are consistent with other research (Bellenger & Robertson, 1978; Cobb & Hoyer, 1986; Koci, 2002; Kollat & Willet, 1967; Marketing Week, 2003; Stern, 1962). A more extreme result was found by the POPAI (point of purchase industry body) which indicates that 75 percent of buying decisions are made in-store (Miller, 2002).

Merchandising techniques are in-store strategies used to market and sell products. These strategies have been studied and validated in an effort to improve sales through incremental in-store impulse purchases. One such

merchandising technique involves location strategies which includes two components: product position and shelf space. Product position and shelf space translate into sales because the product is more likely to be seen (Desmet & Renaudin, 1998; Wilkinson, Mason, & Paksoy, 1982). In the online environment, product position is the equivalent of the location of the offer on the screen while shelf space is the equivalent of the real estate or size of the offer on the screen.

Point-of-sale is a special location strategy for in-store merchandising in which products are offered at the store checkout, making the items easy and convenient to access, encouraging impulse purchases. In 2002, the National Association of Chain Drug Stores / American Greetings' Research Council (NACDS/AG) tested the effects of chocolate and gum/mint counter-top displays at their checkouts. Sales increased 12 percent in the stores with the chocolate counter-top displays and decreased by 15 percent at stores without the displays. In the stores with gum/mints at the checkout, category sales increased by 177 percent while category sales at locations without the display decreased by 5 percent (Eder, 2002). This research demonstrates and reinforces the effectiveness of point-of-sale merchandising and impulse purchases in the brick-and-mortar retail environment. In the online environment, point-of-sale items are also offered at the point of checkout.

Impulse items are not always hedonic, consumable products like gum, chocolate or candies. Building supply dealers have experienced success at encouraging impulse buying by selling safety glasses, tape measures, carpenter pencils and pencil sharpeners at the checkout and relocating power tool displays to strategic, high-traffic locations such as near the contractor desk area (Koci, 2002). Another non-consumable example of a retailer capitalizing on impulse buying is SwatchTM. In 2001, SwatchTM created a point-of-sale display for their watches that allowed the consumers to pick up the products and play with them instead of being locked away behind glass as in traditional jewelry stores. This tactile stimulation lead to higher levels of impulse buying and watch sales increased 80 percent (Miller, 2002).

Retailers do not compromise space for profits in point-of-sale displays. In a traditional retail setting marginal returns from allocated shelf space are regressive; each additional space unit allocated to a product or a product category yields a lower increase in sales than the previous one (Desmet & Renaudin, 1998). In contrast, Desmet and Renaudin's (1998) research found that the marginal returns from point-of-sale space are constant; each additional space unit allocated yields the same as the previous one. This shows that increasing point-of-sale merchandising space results in higher returns than increasing shelf space allocation. In addition to providing constant marginal returns for space, point-of-sale purchases have another beneficial property; they

do not cannibalize the sales of other items since the impulse purchase is made at the time of checkout (Eder, 2002; Iyer, 1989). In other words, the impulse items are not substitutes for other products and as a result are incremental purchases that increase the total amount spent.

The nature of impulse purchases are discussed in detail in the remainder of this section. Categories of impulse purchases are discussed in section 2.1 below. With this enhanced understanding of impulse purchases, Section 2.2 reviews factors that influence impulse buying in brick-and-mortar stores. Section 2.3 reviews these factors in relation to an online retail environment and discusses which factors are transferable to online stores. Finally, this section ends with a more thorough explanation of the focus of this paper.

2.1 Categories of Impulse Purchases

Previous research has identified four classifications of impulse buying: pure, reminder, suggestion and planned (Miller, 2002; Stern, 1962). Pure impulse buying is truly buying on impulse where the purchase is outside of the normal purchase behaviour and is initiated by emotional appeal. For example, a consumer who rarely buys magazines sees a People magazine at the checkout while waiting in line at the grocery store and desires it based on the cover story and pictures. In this case, the purchase of the magazine is considered pure

impulse because it is outside of the normal purchase behaviour and it satisfies an immediate desire initiated by an emotional appeal.

Reminder impulse buying occurs when a purchase is made upon something cueing or reminding the consumer to make the purchase. In reminder impulse buying the consumer knows the product's features prior to being exposed to the product as a result of prior experience through a past purchase or exposure to advertising. For example, a consumer is in the paper products aisle buying paper towels and notices the toilet paper. This visual cue provides a reminder that the consumer is down to the last roll at home which results in the purchase of the toilet paper. Although this purchase fulfills an immediate need, it is not a pure impulse purchase because the consumer purchases this product on a regular basis and has prior product knowledge about the features of the product. In contrast, in a pure impulse purchase, the item is not something that the user normally purchases or planned to purchase.

Suggestion impulse buying occurs when the consumer sees the product, visualizes an application for it, and decides that they need it. In this case, the consumer has no prior product knowledge about the item and must learn about it based on the display, packaging, or product itself. Purchasing the suggestion impulse item fulfills the desire for the product immediately even though use or consumption of the product may be delayed. An example of this is a consumer who sees a plastic garlic peeler for the first time in the grocery store. The garlic

peeler is a flat, malleable piece of plastic with instructions to place a single garlic bud inside, fold the plastic in half, and roll on a solid surface to remove the garlic skin. The display unit is located next to the garlic in the produce department and includes full-colour pictures with step-by-step directions. If this item is purchased because it appeals to the shopper since it appears to be much easier and faster than using a paring knife, the purchase of the garlic peeler is a suggestion impulse purchase. The use of the garlic peeler is delayed at minimum until the consumer arrives in the kitchen and starts peeling garlic and could be delayed indefinitely to the next time the consumer is required to prepare garlic. This is not a pure impulse purchase because the user has a rational or functional purpose for the item, whereas during the pure impulse transaction the user is fulfilling an emotional desire. This is not reminder impulse buying because the consumer does not regularly buy the item. The consumer made this decision upon being exposed to the item, its display, and instructions for the first time and envisioning an application for it.

Finally, "planned" impulse buying occurs when the consumer buys products based on price and product specials. The consumer is in the store to buy specific items on their list, but they will make "planned" impulse purchases based on specials and sale prices. For example, a consumer is in the store to buy milk, eggs and bread. That is all that is on their shopping list. On the way to the checkout they notice a Cheerios display where Cheerios are on sale. The

consumer knows that her children eat Cheerios every morning for breakfast and the family consumes one box per month. She also knows that she has a full box at home because she purchased one last week. Regardless, the consumer adds the Cheerios to her shopping cart. The planned impulse purchase is distinguished from the three other impulse purchase categories because the product is not filling an immediate need or desire since the consumer is buying based on price. This purchase is not pure impulse because the item is not outside of the normal purchase behaviour; the consumer buys this item regularly. This purchase is not considered a reminder purchase because the consumer is not buying the product simply because she was reminded of the product in the store; she does not really need the Cheerios for at least another month. In fact, the consumer knows she'll be in the grocery store at least three more times before they require another box of Cheerios based on past consumption rates. The consumer is buying Cheerios because are on sale. This purchase is not a suggestion impulse item because she was aware of the product prior to being exposed to it; she knows how the product is used. The purchase of Cheerios are a planned impulse purchase since the consumer did not plan to buy Cheerios, she is not out of them yet at home but they are a regular item on the shopping list and she knew she would be buying the Cheerios at a later date at the regular price when the current home stock is depleted.

Any of these categories of impulse buying could occur in the online retail environment. For example, an avid vegetable gardener who goes to the Amazon.com site to purchase a book on advanced gardening techniques could be enticed to buy additional items on pure impulse or as a reminder, suggestion or planned impulse. The impulse purchase category is dependent on the consumer's prior knowledge about the product, intentions when starting the shopping trip, exposure to stimuli and emotional appeal. If the gardener is presented with an offer for a type of bulb that is recommended for her geographical region, she may buy a package of bulbs on pure impulse. This is considered pure impulse because this vegetable gardener does not typically purchase bulbs. Consider the shopper who notices an offer for garden note cards and is reminded that she is low on cards and decides to purchase them. This is an example of a reminder purchase. A suggestion impulse purchase could occur when the gardener sees an ad for 'The Claw' cultivator that allows the gardener to loosen soil and uproot weeds with minimal effort from a comfortable, standing position. This is a suggestion impulse purchase because the shopper has no prior product knowledge and is buying the item based on the picture and visual display. A planned impulse purchase could occur if the customer is offered a discount for buying a second book and decides to buy two gardening books instead of one. Although the shopper initially intended to buy only one gardening book, the special price for multiple units provided incentive to make a

planned impulse purchase. These examples demonstrate that each of the four impulse categories could have some role in the online retail environment.

2.2 Factors that Influence Impulse Buying in Brick-and-Mortar Stores

Stern (1962) identified nine factors that influence the buying impulse in brick-and-mortar stores: low prices, mass distribution, self-service, mass advertising, prominent store displays, low marginal need for an item, short product life, smaller sizes or lightweight, and ease of storage. These factors have one thing in common; they are all associated with the ease of making a purchase.

Low prices. Price encourages impulse buying in two ways. Price reductions, cost savings, or sales promotions can persuade an unintended purchase (Laroche, Pons, Zgolli, Cervellon, & Kim, 2003). This is characteristic of planned impulse purchases. For example, a consumer has two limes on her shopping list and in the grocery store limes are priced at \$.40 each or three for \$1. For an extra \$.20, the consumer gets an additional lime. If the consumer purchases three limes, the third lime is considered a planned impulse purchase because it was purchased based on the special price.

The second way price influences impulse buying is evident in the 'dollar store phenomenon' or transaction utility where everything is 'only \$1' but the

when they enter with the same specific shopping goals in mind. This indicates that the low price is encouraging the consumer to purchase items and that a higher price may have curbed the impulse purchase (Thaler, 1985, 1999).

Mass distribution. Mass distribution refers to making the item available in as many locations as possible so that when the consumer does choose to purchase it, it is readily available. Chewing gum is available in grocery stores, gas bars, convenience stores and some restaurants. The rationale in mass distribution is that the more times and places it is available to consumers, the more likely they are to see it, find it and buy it.

Self-service. Self-serviced counters are more likely to lead to an impulse purchase than clerk-serviced counters because the consumer can shop more quickly with more freedom to look at, touch, and read the product display. In the self-service counter, the shopper does not have to rely on a clerk for every step of the purchase process. For example, if a photo store keeps all products for sale including frames, cameras and paper behind the counter, the consumer must wait until a clerk is free to even see a product or its packaging up close. In addition, when a consumer does have the attention of a clerk, if there are other customers waiting, pressure exists to shop and complete the transaction quickly. When items are on the store floor, consumers can look at all of the items, compare product features and request the assistance of a clerk to ask a specific

question or to make a purchase. With self-service stores, shoppers are not restricted, rushed or delayed as a result of the clerk's availability. The tradeoff in the self-service store is that there is not a customer service representative to suggest incremental add-on, cross-sell or up-sell items to increment the value of the current purchase transaction (J. Lee et al., 2001).

Mass advertising. Mass advertising leads to impulse purchases because it creates consumer knowledge about an item or brand which increases the chances of the product being recognized and chosen on impulse by the consumer (Kotler, 1991). For example, a person who does not normally buy or eat ice cream purchases a Tiger Tail ice cream cone when walking through a mall as a result of being reminded of an advertisement with young people having fun, looking refreshed eating the product. This purchase is considered an impulse purchase because it was not intended or preplanned by the consumer. Since impulse buying is based on marginal need for the item, the shopper must understand what the item is, what it is used for and in turn, what they could use it for. Mass advertising contributes directly to this goal because it creates consumer knowledge about the product.

Prominent store displays. One of the main challenges of in-store merchandising is getting the consumer off of auto-pilot to notice a promotion or product since shopping is part of a routine. By definition, consumers are not looking for an impulse purchase item, therefore the store display must be

Renaudin, 1998). Since customers are exposed to impulse offers on a regular basis, they are becoming very sophisticated and immune to point-of-sale techniques. Two strategies that assist to address these issues and to engage an impulse purchase are prominence and location of the display. For example, a point-of-sale display was created for the Guinness World Records book that held 100 books, was covered in graphics from the book, and lit up with chaser lights at the head of the unit. Often not all stores offered a display choose to use it, but in this case 100 percent of the retailers it was offered to placed it in their stores. This point-of-sale strategy resulted in strong sales increases for the annual Guinness World Records book. Since this book is not advertised or marketed in any other format or location, these sales are all impulse purchases and the increased success was a result of the prominence and location of the point-of-sale display (Miller, 2002).

Low marginal need for an item. The marginal need for the item refers to the degree that the consumer requires or needs the item. For example, items such as bread, milk, prescriptions and shampoo have high marginal need. A family with three children that eat cereal in the morning need milk; milk has high marginal need in this family. Thus items of high marginal need are planned, are included on the shopping list and time would be scheduled to purchase these items. In contrast, low marginal need items are not necessities

and can be purchased with other items or when it is convenient to buy them.

Low marginal need items are not the focus or intended purchase of a shopping trip. The need for them is less and as a result, these items are more likely not to be planned but to be impulse purchases. For example, gum, chocolate bars, and magazines are items with low marginal need and as a result, are rarely included on a shopping list. Instead, items with low marginal need are purchased when the consumer is near the display or when the item is convenient to buy. As a result, impulse items are usually products with low marginal need.

Short product life. Items that are perishable or are consumed quickly have a short product buying cycle. The high frequency of purchasing these items decreases the shoppers need to plan for it; instead shoppers depend on encountering the product in the store and buying it on impulse (Stern, 1962). For example, a mother that loyally shops for groceries weekly at one grocery store knows that her family consumers two containers of orange juice per week. In this case, although the consumer intends to buy juice, she does not include it on her grocery list; instead, when the shopper reaches the open concept refrigeration units where eggs and cartons of milk and juice are displayed, the she adds the orange juice to her cart. Essentially, the shorter life results in a reduced sensitivity to making the purchase since the consumer makes it so often.

Small size and light weight. Large or heavy items discourage impulse purchases in brick-and-mortar stores because the additional effort required to get

the item to the destination outweighs the expected benefits of the item. For example, while shopping for printer paper at an office supply store, a customer notices an office chair with wheels that is reasonably priced and comfortable. The customer's current chair has no wheels, is old and is uncomfortable so he is tempted to buy this new chair as a replacement. The impulse to purchase the new chair could be restrained by thoughts of the chair being awkward or too heavy to transport to the office. Suddenly, the effort outweighs the benefits of this item and the impulse purchase is discarded. Conversely, smaller or lighter items that can be easily added to existing purchases are more appropriate impulse items.

Ease of storage. Ease of storage influences an impulse purchase in a similar manner to how the large or heavy item discourages the impulse. If the storage efforts outweigh the benefit or advantage of the item, the impulse to purchase the item will be discarded. For example, if a consumer's favourite frozen dinner is on sale but there is no space in the freezer at home, the purchase of the frozen dinner is discouraged due to storage limitations. If the consumer does not have space for the item, the potential impulse purchase could be eliminated.

In summary, Stern identified nine factors that influence impulse buying in the brick-and-mortar retail environment that can be divided into three categories: industry-oriented, store-oriented, and product-oriented. Mass

distribution and mass advertising are external to the retail environment and are industry-oriented factors. Store-oriented factors are characterized by the retail environment such as self-service and prominent store displays. Product-oriented factors are focused on product characteristics that contribute to it being an appropriate item for an impulse offer and these include low price, low marginal need for the item, short product life, smaller sizes, and ease of storage. These factors influence the likelihood of impulse purchases and should be implemented in a strategy to increase impulse sales in the retail environment.

Eight of these nine factors can be transferred to the online retail environment since there are so many similarities between these two distinct sales channels. Online impulse buying is the topic of the next section where the topic of how the brick-and-mortar research can be applied to the online environment will be discussed.

2.3 Online Impulse Buying

Existing research on impulse buying has focused on brick-and-mortar stores (Bayley & Nancarrow, 1998; Cobb & Hoyer, 1986; Iyer, 1989; Jones et al., 2003; Kollat & Willet, 1967; Phillips & Bradshaw, 1993; Verplanken & Herabadi, 2001) and television infomercials (Agee & Martin, 2001). Research on e-commerce purchasing has traditionally focused on improving the user experience (Palmer, 2002), advertising (Kumar, Rangachari, Jhingran, &

Mohan, 2000; Ling & Lawler, 2001), and identifying factors to determine the probability of users making an initial purchase (Lee, 2002).

Koufaris (2002) studied consumer behaviour in the online environment from the perspective of how emotional and cognitive responses to visiting an online store for the first time influence the shoppers intention to return and their likelihood to make unplanned purchases. Although they were able to conclude that shopping enjoyment and perceived usefulness of the site were predictors of the consumer's intention to return, their results on unplanned purchases were not conclusive.

To date, it appears as though the brick-and-mortar strategies encouraging impulse buying in research have not been applied to e-commerce applications or the online retail environment. This section discusses the transferability of the categories and factors that Stern identified for brick-and-mortar stores to the online environment.

There are many similarities between brick-and-mortar and online stores. Both channels sell products and must communicate product characteristics, value, warranty information, policies (such as privacy, delivery or return policies) and price to their customers. Both channels lead the customer through the purchase process which includes product selection, payment, and packaging or delivery. In addition, both brick-and-mortar and online stores allocate

significant advertising and promotion budgets in order to recruit customers to visit and make purchases (Ling & Lawler, 2001). Brick-and-mortar stores design attractive signs and storefronts, advertise on the radio and in print publications, issue flyers, host onsite customer appreciation events such as barbecues, and send direct mail to consumers. Online retailers design attractive and user friendly websites, print their web URL on their products, advertise online using banner ads, and submit their web URL to search engines to improve their ranking. These marketing techniques are not exclusive to either brick-and-mortar or online stores. Overlap exists between the sales channels, for example, both brick-and-mortar and online stores may purchase advertising in a magazine or publication related to their industry, products or services.

Although the online retail environment has many characteristics in common with the brick-and-mortar retail environment, the online transaction is very different from a face-to-face retail purchase in a brick-and-mortar store. In the online environment, there is no physical store, no salespeople to help or hinder the purchase process, nothing tangible that the consumer can smell, touch or feel. In addition, consumers are responsible for completing each step of purchase transaction from filling the shopping cart to submitting payment information

The single of Stern's (1962) nine factors that is not relevant to the online environment is mass distribution. This factor is critical for specific consumable

goods like gum or candy or non consumable goods like magazines or batteries because the strategy behind mass distribution is to have these products available when the consumer wants them, no matter where the consumer is. In order to accommodate this, these products are sold in various accessible locations such as supermarkets, gas stations and convenience stores. Online stores focus on unique items and sell products that would not necessarily use a mass distribution channel. As a result, mass distribution is not a factor in online impulse purchases.

The remaining eight factors that influence impulse purchasing in brickand-mortar stores are transferable to the online environment. Mass advertising
is one of the two industry-oriented factors that can be transferred to the online
environment. Creating consumer knowledge about a product through mass
advertising is very important in the brick-and-mortar environment because the
more a product is advertised and exposed to the consumer, the more chance it
has of being a reminder or planned impulse purchase. This holds true in the
online environment for the same reason; if the consumer is aware of a product as
a result of prior exposure through advertising, it is more likely to be a reminder
or planned impulse purchase.

The store-oriented factors, prominence of display and self-service, are transferred to the online environment via visual display and communication through the monitor within the browser. Consumers must be exposed to an

impulse offer in order to buy it because by definition, they are not looking for the impulse item. In short, if consumers do not see an item, they can not buy it.

As a result, prominent displays are equally important in traditional and online stores.

Self-service leads to impulse purchases in traditional stores because it allows the consumer to shop at their own pace, compare products, and gather information about items for sale in order to make a purchase decision. This follows for online stores where self-service is implicit in the store environment; the consumer looks at the products, adds items to their shopping cart, confirms their purchase and pays for the items in the absence of the assistance of a store clerk. Self-service reaches a new level with online stores since the online store is open twenty four hours a day, seven days a week, three hundred sixty five days a year. The online store is not restricted by laws designating business hours or holiday closings. This is a tremendous advantage because the user can browse and buy when it is convenient. This assists to improve the likelihood of impulse purchasing because the more time shoppers have, the more likely they are to notice items not included on their shopping list and therefore are more likely to indulge in impulse buying (Iyer, 1989).

Although the online retailer does not incur expenses for salespeople, they also do not get the benefits of salespeople to answer questions the consumer may have, to help compare product features, to suggest an add-on purchase or to

recommend additional items that complement the items being purchased. For example, a shopper buying a digital camera could also need a protective case, batteries or extra memory cards. Although it is important to have an intuitive interface design, clear navigation and an appealing usable interface (J. Lee, Podlaseck, Schonberg, Hoch, & Gomory, 2000; Nielsen, 2000; Palmer, 2002), the lack of personal communication can result in the online stores missing out on additional revenue that could be generated from incremental add-on or cross-sell sales. This limitation can be overcome online through merchandising techniques which will be discussed later.

The product-oriented factors including low prices, low marginal need for the item, short product life, small size and ease of storage can all be transferred to the online environment. Pricing strategies can be transferred from the brick-and-mortar environment to the online store since consumers appreciate 'a deal' and getting value for their dollar whether they are shopping in person or online. Items with low marginal need are good impulse items online for the same reason they are good impulse items in the brick-and-mortar environment; because items with high marginal need are usually planned and part of the shopping list. The short product life is still a concern in the online environment because the shopper remains less sensitive to purchasing products that they purchase regularly. Ease of storage is a factor that can be transferred to the online

environment because items that ca not be easily stored discourage a customer from purchasing such items on impulse regardless of the purchase channel.

Size and weight of an item are also factors that could influence impulse buying in the online environment, but perhaps for the opposite reason it is a factor in the brick-and-mortar store. Awkward or heavy items discourage shoppers to purchase the item in person because of the additional effort required to get the item to its destination. In contrast, awkward or heavy items may be good online impulse items because the consumer avoids the awkwardness or weight since the responsibility of delivery is passed to someone else. This potentially makes large or heavy items good impulse items to offer to online consumers.

In summary, eight of Stern's nine factors that influence impulse buying in brick-and-mortar stores can be transferred to the online store environment. The goal of this research is to identify factors that influence the likelihood of an impulse purchase during an online purchase transaction and is focused on merchandising techniques that are internal to the online store environment specifically. Stern's prominent display factor meets this requirement, and will be the only one of Stern's nine factor's that will be considered in this paper.

2.3.1 Focus of This Research

This research is focused on merchandising strategies that increase online impulse purchases. Merchandising strategies involve techniques that are applied internally to the website once the visitor is viewing the site as opposed to marketing techniques that are applied externally to entice consumers to visit the website. One popular merchandising strategy for brick-and-mortar stores focuses on developing effective displays (Desmet & Renaudin, 1998; Drèze, Hoch, & Purk, 1994). This paper considers Stern's "prominent store display" factor and whether the presentation mode or location of the impulse offer influences the likelihood of an impulse purchase. This is tested by presenting the offer in one of two formats: in a popup that appears in front of the checkout page versus embedding the offer into the text of the checkout page.

The two other factors that will be considered in this research are amount spent and providing a reason to purchase. As mentioned previously, these factors are not included in Stern's results. Instead, their inclusion was motivated by topics in current research that are receiving significant interest but to date, have not been applied in the context of impulse buying. These factors and the motivation for including them are discussed below.

Mental accounting indicates that as a consumer spends more in one category or account of spending, they will feel less 'pain' spending additional

funds or buying additional items (Thaler, 1999). Does it follow that as consumers spend more on a website, the more likely they are to make an impulse purchase and the less consumers spend on a website, the less likely they are to make an impulse purchase? The amount consumers spend on the site may be a significant factor in the likelihood of making an impulse purchase. As a result, this hypothesis will be tested using real purchase transactions.

In retail, one of the main focuses of internal promotional and merchandising efforts is to get consumers to spend more at the store through incremental purchases. One strategy that has been overlooked to date in research on impulse buying is linking the impulse item with a reason to purchase; a reason to choose to buy an item where the reason is independent of the product features or benefits. For example, some retailers offer direct compensation or incentives to encourage additional purchases. Amazon.com offers free shipping on qualifying orders over \$25. The offer of free shipping provides a good reason for consumers to make unplanned purchases, or impulse purchases, in order to reach or exceed the \$25 threshold. Amazon is giving consumers a reason to purchase; a savings in shipping fees. Another example of providing a reason to purchase is based on the reality of guilt, self-gifts and selfindulgences. Although not considered in the context of impulse buying or merchandising, Simonson and Kivetz (2002) found that in reward program there was an increased preference for luxuries when the goal or reward was more

difficult to reach. They concluded that people like to earn the right to indulge because justifies the decision and provides a reason to choose frivolous luxuries over necessities. Strahilevitz and Myers (1998) conducted research on linking a purchase with a charitable donation in the brick-and-mortar environment as a marketing tool. By issuing a coupon to encourage consumers to visit the store to buy a specific item they increased sales. An example of this strategy is to donate a portion (such as 10 percent) or a fixed amount (such as \$1) of the sale of an item to a charity like Breast Cancer. They found that linking a charitable donation to frivolous products was more effective than linking the donation to practical products. The donation element provides a "good" reason to purchase the impulse offer. Since providing a reason to purchase has not been considered in the online retail environment, this paper will consider whether providing a donation as a reason to purchase will influence the likelihood of an impulse purchase in the online retail environment.

CHAPTER 3 THEORY

This chapter presents the theory behind each hypothesis and the hypotheses themselves. The first section discusses the responsiveness to money spent and how the total amount of a purchase transaction influences an impulse purchase. The second section discusses how the prominence of the offer or the mode of presentation can influence an impulse purchase and whether a popup is more or less effective at encouraging the impulse purchase. The final section discusses whether or not a reason to purchase will have a positive impact on the consumer making an impulse purchase.

3.1 Responsiveness to Money Spent

Neo-classical economic theory is based on normative models of consumer choice and anticipates that consumers behave rationally and consistently with economic principles. In reality, consumers regularly violate economic principles in their decision making and research confirms that normative models fail to predict consumer behaviour (Thaler, 1980). Consider a couple who expects to buy their first home in five years and has saved \$10,000 for a down payment which is deposited in a bank account at an annual interest rate of 3 percent. This couple purchases a car for \$5,000 that they financed at 5 percent for three years. According to the normative model, this couple should have withdrawn the \$5,000 to pay for the car from their savings and repaid their

savings with the monthly car payments. In this example, at moderate but unnecessary economic cost, this couple chose to leave their savings in the bank account in fear of not repaying it as a result of self control issues (Thaler, 1985). Mental accounting offers a behaviourally based theory of consumer choice that is explains and predicts actual consumer behaviour as opposed to the anticipated optimal behaviour or normative model of consumer choice (Thaler, 1980, 1985, 1999).

All sizes of organizations from a single person household to Nortel have explicit and/or implicit accounting systems. These systems involve assigning revenues and expenses to different accounts. Consumers also create various accounts which they use to categorize expenses and revenues such as 'house expense', 'vehicle expense', 'vacation expense', 'work income' and 'commission income' (Heath & Soll, 1996; Henderson, 1992). These are referred to as mental accounts as often they are not explicit and are psychological manifestations. Consumer behaviour and decisions are made based on these mental accounts which possess their own set of mental accounting rules and arithmetic.

Mental accounting arithmetic is based on prospect theory and the value function. Kahneman and Tversky (1979) proposed prospect theory as a new descriptive model of choice under uncertainty that compensates for the human

attributes of perception and judgment. They illustrate the concept of mental accounting through the following scenario (1981, p. 457):

Calculator Scenario:

\$15 Condition

Imagine that you are about to purchase a jacket for \$125, and a calculator for \$15. The calculator salesman informs you that the calculator you wish to buy is on sale for \$10 at the other branch of the store, located 20 minutes drive away. Would you make the trip to the other store? (Yes 68%)

\$125 Condition

Imagine that you are about to purchase a jacket for \$15, and a calculator for \$125. The calculator salesman informs you that the calculator you wish to buy is on sale for \$120 at the other branch of the store, located 20 minutes drive away. Would you make the trip to the other store? (Yes 29%)

In each condition, the total amount being spent is \$140 and the savings is \$5 yet 39 percent more subjects chose to drive to the other store in the first condition. If the \$5 gain was considered in relationship to the consumer's wealth, as predicted by expected utility theory, the responses to the two conditions would have been the same. Kahneman and Tversky explained why the \$5 gain was valued differently in the two conditions using prospect theory (1979). These results can be explained by a proportion bias. In each condition, the subjects created one account that included the price of the calculator and the potential \$5 savings; this account did not contain the complete purchase amount of \$140. The creation of this account for the calculator eliminated a high-level or overall evaluation and led over double the consumers to be misled by the psychophysics of pricing.

Kahneman and Tversky (1979) state that "our perceptual apparatus is attuned to the evaluation of changes or differences rather than to the evaluation of absolute magnitudes" (p. 277) To illustrate this concept, consider four weights: 4 lbs, 5 lbs, 44 lbs and 45 lbs. The difference between the 4 lbs and 5 lb weight and the 44 lb and 45 lb weight is 1 lb. When you lift the 4 lb weight and then the 5 lb weight, there is a noticeable difference in weight. On the contrary, when you lift the 44 lb weight and the 45 lb weight, it is more difficult to recognize the 1 lb difference. The weight of the first item serves as the value to which the second item is compared even though the magnitude of the difference remains constant at one. As the ratio of the total weight and differences in weight increases, the difference is more difficult to detect. The same applies to money. As in the weight example, the amount in one specific mental account (the first weight) serves as the comparison point for change. When the gain or loss one experiences is constant regardless of the initial amount, the magnitude of the gain or loss decreases when the initial amount in the account is higher. Conversely, the magnitude of the gain or loss increases when the initial amount in the account is lower. For example, imagine two people; person A has a \$50 monthly entertainment budget and person B has a \$500 monthly entertainment budget. If both of these individuals spend \$20 on going to a movie, person A has spent 40 percent of their initial amount and person B has only spent 4 percent of their initial amount. Person A feels the magnitude of the amount of this activity more than Person B because it amounts to a higher proportion of their initial "entertainment account" total even though both individuals spent the same \$20 amount. The opposite is also true. If each individual receives a \$25 gift card to a movie theatre, a gain of \$25 is experienced by each of the two individuals but person A feels the magnitude of this gain more than person B because it amounts to half of their initial total or a gain of 50 percent. Both individuals consider the loss or gain in terms of the amount of money in their "entertainment account" rather than their total wealth or current bank balance. In summary, gains and losses are evaluated from an initial comparison point, typically the status quo (Kahneman & Tversky, 1979, 1984).

This relationship is represented graphically in Figure 1. In this figure, the X axis is the amount spent and the Y axis is the impact or sensitivity to the change. The convex shape of the curve indicates that the further away from (0,0) you move horizontally along the X axis, the less change you will see in the Y axis for a given increment. The closer you move to (0,0) horizontally along the X axis, the more change you will see in the Y axis for a given increment. For example, consider the difference in impact that an additional \$5 of spending would have on someone who spent \$100 compared to someone who spent \$10 in one mental account. In Figure 1, the difference in impact between the \$10 and \$15 purchase points on the Y axis are designated by Δx_1 and the difference in impact between the \$100 and \$105 purchase points are designated by Δx_2 .

Although the difference of \$5 between each of these values along the X-axis is a constant, the respective differences on the Y-axis are not equal. $v(x_1)$ represents a significantly bigger difference than $v(x_2)$. As a result, person A would feel the magnitude of this additional expense less than person B and therefore Person A would be less averse to spending the extra \$5 because they have already spent \$100 in this account.

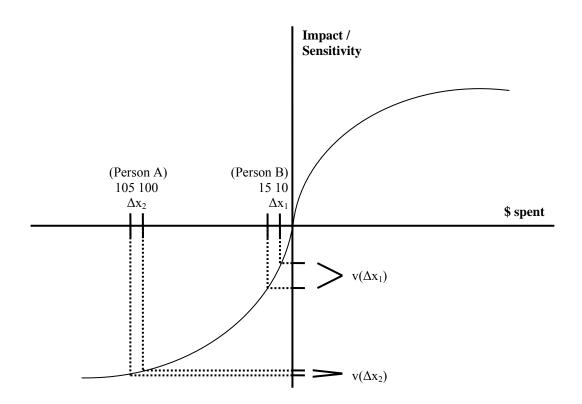


Figure 1 - An Example with the Value Function

Consider the situation where a consumer is making a \$39 000 vehicle purchase and wants to add a new stereo to this vehicle. When the consumer is already spending \$39 000, the additional \$500 for the stereo relative to the total purchase is not very significant. In the absence of the vehicle purchase, when a consumer goes to Future Shop to purchase a stereo priced at \$500, this purchase feels 'different'; it has more of an impact and it feels like a bigger amount of money than when it was paired with the purchase of the vehicle.

Since mental accounting arithmetic is based on prospect theory and the value function (Thaler, 1980, 1985, 1999), it is understood that when consumers aggregate spending, they group this spending into one category. When consumers aggregate losses, the value function's diminishing sensitivity takes effect since it is easier to spend the 105th dollar rather than the 5th dollar. The more spent in each category, the more difficult it is to distinguish a difference when the category value is increased. For example, in the case where the car stereo was purchased for \$500 from Future Shop, it was the first \$500 the consumer spent and in terms of mental accounting, the \$500 would be allocated to a 'stereo' account. As a result, upon making this purchase, the value of this category starts at \$0 and moves to \$500. If the consumer purchases the car stereo with the \$39,000 car, then the \$500 is added to the 'car' account which already contains the \$39,000 the car purchase amount. The consumer is more receptive and has reduced sensitivity to the change of \$500 when it is joined to a

\$39,000 purchase in the 'car' category. This reduced sensitive in mental accounting terms is known as diminishing sensitivity. This is summarized in the following equation.

$$v(500) > v(39500) - v(39000)$$

v(500) is the \$500 the consumer could potentially spend at Future Shop on the car stereo which would be assigned to the new 'stereo' account. Since it is the first \$500 the consumer has spent in the 'stereo' account, the comparison price is \$0. When the stereo is purchased with the car, it is added to the 'car' account. v(39500) is the cost of the car with the stereo in the 'car' account and v(39000) is the cost of the car without the stereo in the 'car' account. The 500 difference between them represents the purchase of the stereo. In summary, this equation states that the sensitivity for purchasing the \$500 stereo at Future Shop where it is the first \$500 the consumer has spent has more of an impact than the difference between spending the additional \$500 on the stereo when coupled with the vehicle purchase of \$39,000. Sensitivity has diminished significantly because buying the stereo with the car provides a higher comparison price than spending the first \$500.

Based on mental accounting theory, I believe that consumers making purchases on the HHS Reunion website are placing these purchases in one 'Reunion' expense category and therefore all purchases each person makes will

be evaluated in an aggregate manner. As a result, the value function indicates that the more someone is spending on a website, the more this person would experience diminishing sensitivity. As this effect of diminishing sensitivity increases, an impulse purchase should be more likely because the amount spent is increasing and the pain of spending will be reduced.

Hypothesis 1: The likelihood of an incremental purchase increases with the dollar amount spent.

3.2 Mode of Presentation

Prominent store displays is one of the nine factors identified that encourages impulse buying in brick-and-mortar stores (Stern, 1962). There are two components of a prominent store display; location and the appeal of the display itself. By definition, the consumer is not looking for the impulse item so if a consumer does not notice the impulse offer, they are not going to buy it. Thus the location strategy is merely the first step in getting consumers to make the purchase. Once the offer is located where consumers could potentially see it, the next challenge is to get the attention of the consumer so that they are guaranteed to see it. With many products competing for the attention of the consumer, all offers will not be seen by all consumers. Customers are becoming very sophisticated and immune to merchandising techniques because they are exposed to them on a regular basis (Miller, 2002). As a result, a substantial

amount of research has been done on implementing effective displays for brick-and-mortar stores (Desmet & Renaudin, 1998; Drèze et al., 1994; Shapiro, 2001; Wilkinson et al., 1982). Research indicates that the position of the product on the shelf is far more important than the size of the display or the number of products facing the consumer (Desmet & Renaudin, 1998). Brick-and-mortar stores use eye-catching displays, placement at checkout and other merchandising techniques to ensure the consumer sees their products.

Online stores face similar challenges to the brick-and-mortar stores. Since location and prominence of the display are influential factors for impulse purchases in brick-and-mortar stores, it follows that these are significant factors in the online store environment. Both sales channels must get the consumer off of auto-pilot to notice the promotion or product. In the online environment, just because an offer is on a screen, it does not necessarily mean that the consumer will notice it because user perception is "selective, relative and limited."

(Aspillaga, 1996) Attention or focus could be diverted to something else other than the impulse offer, such as reviewing shopping cart contents, calculating the purchase total or looking for the search feature to locate a specific product. As a result, it is imperative to present the offer in a format that is attention-grabbing and that the user will notice.

In the electronic environment, presenting the information in a consistent format contributes to increased control of viewers' attention because the viewer starts to rely on the layout and location of elements such as navigation, content and links. The goal of the impulse offer is to increase the likelihood of the visitor noticing the offer. This can be accomplished through visual discrimination where the presentation is designed such that it is quantitatively and qualitatively distinct from other elements on the screen (Aspillaga, 1996; W. Lee & Benbasat, 2003)

The standard method to present information on the web consistent with other pages is to insert the offer in an existing page where the content is integrated into the page layout or embedded in the existing content.

Alternatively, to achieve visual discrimination, a new window could be launched, referred to as a popup, which would contain the offer. A popup is a new persistent window that appears on top of the existing screen that the consumer is using. A window that is persistent will not go away until the user clicks a 'Close Window' button or link to close the window. In addition to being quantitatively and qualitatively distinct from the traditional layout of the site, the popup format increases the chances that a user will notice the offer because the user must explicitly deal with the offer prior to moving on. The consumer must decide whether or not to buy the item and close the window; either of which require only one click of the mouse. The popup maximizes

consumer exposure to the offer and makes the offer very prominent. This leads me to believe that popups will be a more effective and successful tool to sell impulse items.

HYPOTHESIS 2: Likelihood of an incremental purchase increases if the impulse offer is presented in a popup format.

3.3 Reason to Purchase

Previous research has found that people like to have reasons for their purchases (Shafir, Simonson, & Tversky, 1993). If faced with a choice, people will find different rationales in order to support one side or the other. These researchers offered students who had just written a major final exam a limited time offer (24 hours): a 5-day vacation package. In the first condition, when the students did not know the results of their exam, 61 percent of participants chose to delay their purchase decision. In the second condition, students were told about their performance and then given the same offer. When students were aware of their results, 30 percent of the students who failed the exam and 31 percent of the students who passed the exam chose to delay their purchase decision. Therefore, 30 percent more people made their final decision when they had a reason to purchase; in this case they knew their results. For the subjects who passed the exam, the trip was a reward for success and for the

before rewriting. Interestingly, the same number of people in the pass and fail categories made the decision to buy or not to buy the vacation package. 54 percent of those who passed the exam and 57 percent of those who failed the exam chose to buy the package while 16 percent of those who passed and 12 percent of those who failed chose not to buy the package. This demonstrates that participants did not require one reason or another, they just required a reason. The provision of a reason to purchase (passing or failing the exam) increased the willingness to commit to make a decision on whether or not to buy the vacation regardless of whether it was to celebrate or commiserate.

The research of Huber and colleagues (1982) on the decoy effect is another example of giving a reason to purchase. These researchers provided a choice between product X and product Y, with the two products offering a tradeoff between price and quality as depicted in Figure 2. Product X has a better price while Y has better quality. These participants were then told about a 3rd product X' (the decoy) that is higher in price and lower in quality than X and therefore it is less desirable than X. Since X' is an irrelevant alternative, neoclassical economic theory would suggest that this should not effect the consumer decisions, however the results indicate that the number of consumers who choose X increases. The offer of item X' provides a reason to buy the target item X.

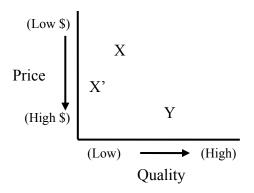


Figure 2 - A schematic representation of decoy effect adapted from Shafir et al. (1993)

Simonson's (1989) research on extremeness aversion reports that decisions in binary choices are not consistent when a third alternative is offered. For example, when option B is added to option A and option C in Figure 3, option C increases in popularity or market share at an increased rate because it is the intermediate option. When all three options are available, it makes economic sense that A and B would maintain the same popularity ratio as when there are only two choices; for example, when option A and option C are offered. On the contrary, extremeness aversion indicates that while the three options are available, option C is the most popular choice because C has small advantages and disadvantages to each of the other options; in other words, it is a compromise between the two other products.

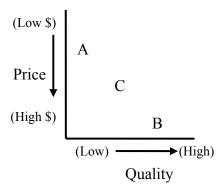


Figure 3 - A schematic representation of extremeness aversion adapted from Shafir et al. (1993)

For example, in one experiment, one condition group was offered a choice between two cameras a Minolta X-370 priced at \$170 and a Minolta 3000i priced at \$240 and the results were split evenly between the two models. In a second condition, a third option was inserted of a Minolta 7000i priced at \$470, resulting in 57 percent of these subjects choosing the middle option, the Minolta 3000i. The introduction of a third extreme alternative (Minolta 7000i) increases the sales and market share of the intermediate alternative or compromise item (Minolta 3000i) while reducing the market share of the other extreme alternative (Minolta X-370) because the compromise provides a reason to make the purchase.

Research by Strahilevitz and Myers (1998) offers another way to increase sales and encourage shoppers to visit a store. In their research, they tied a donation to charity to a purchase (not an item) so that the consumer not

only benefits in terms of the product purchased, but also the altruistic nature of the giving results in a 'warm glow.' Providing a reason to purchase something at that store gives people a reason to go to the store. Their research concludes that charity incentives are more successful when paired with frivolous or luxury items than practical items. In summary, this research indicates that people like to have a reason to make a decision; when consumers have a reason, they are more likely to make the purchase.

Providing a reason to purchase through a charitable donation is the strategy that will be used in this research as a provision of a reason to buy. This technique will be discussed further in the methods section of this paper. This method is fitting because the donation can be targeted towards a meaningful charity; the Huntsville High School Stepping Stone Foundation.

Hypothesis 3: The likelihood to purchase increases when shoppers are given a reason to purchase the impulse item.

CHAPTER 4 RESEARCH DESIGN METHOD

This study explores three factors that encourage the purchase of an additional item during an online purchase transaction. This was tested by offering consumer's an additional purchase opportunity during the checkout process during a live (real) purchase. Data for this experiment was gathered at the official website of the Huntsville High School (HHS) 100th reunion.² Visitors used this website and online store to purchase their passes to the Reunion, get information about the reunion and purchase souvenirs.³

The website was implemented using HTML, PHP and a mySQL database and was hosted on a LINUX server running the Apache web server. Extensive modifications to the shopping cart were necessary to implement the experimental conditions. For example, each time a visitor requested the checkout to complete a purchase transaction a random number generator determined which experimental condition would be executed in terms of the presentation mode and the reason to buy. Once that condition was determined, the appropriate manipulation was displayed and the condition for each visitor was recorded. If that visitor returned, they would be exposed to the same

² This website can be found at http://www.hhsreunion.ca

46

³ See "APPENDIX A – Huntsville High School Reunion Index Page" to view the initial page visitors see at the HHS Reunion website.

condition so that the output display was consistent. The offer was displayed either embedded in the checkout page or in a popup format and with or without the donation condition.

The changes also involved creating a new table for the impulse purchase order information. The information collected included the order number, order total, experimental condition the visitor was exposed to, total amount spent, and the number of passes, souvenirs and impulse items that were purchased.

Collecting this data and writing it to the order table was a modification required for this experiment that would not have been necessary for the e-commerce functionality of the HHS Reunion site.

In addition, modifications to the checkout procedure were made so that the demographic survey⁴ was presented to the user following the payment process and prior to the final confirmation page; these results were also written to a table. Users who responded to the questions were then offered the opportunity to enter their names into a draw. This data was stored in a separate table for confidentiality so that the individuals who responded to the demographic questions could not be identified.

47

⁴ See "APPENDIX B – Demographic Survey" for a complete list of the demographic questions.

The process of completing a typical online purchase transaction is very similar to a traditional retail purchase except that the customers have to choose their items and checkout themselves since there is no salesperson to assist with this process. The transaction is initiated with visitors browsing products on the website and placing the products in the virtual "shopping cart" by clicking the "Buy Now" button. If the product has attributes, the users would have to specify their choices. For example, if a user wants to buy a t-shirt, the colour (gold or blue) and a size (small, medium or large) must be specified. When done shopping, the visitors proceed to the checkout by clicking the "Checkout" button. The system will ask the customers to sign in or create an account by inputting contact information on a single page form if not already signed in. Once signed in, the "checkout" page shows a summary of contact information, shopping cart contents and total. This page offers consumers an opportunity to verify the purchases prior to submitting payment information. The users may return to change any of the data on this form or may proceed to enter payment information.

When the users view the checkout page they are offered the opportunity to purchase one of three \$5 "add-on" impulse items; a mousepad, eyeglass clips or chocolate truffles. These items were chosen because they could be priced at the \$5 price point, they appeared to be good value for the money, and they were diverse in that they served different purposes and were not all one type of

product. For example, they were not all focused on the computer or clothing. In choosing the items, an effort was made to select products that users would need or want. These items were all unique and were not offered in the souvenirs section of the website. As a result, this impulse item was a surprise and could not have been part of the mental budget allocated for this shopping trip.

The mousepad and eyeglass clips were Reunion souvenirs imprinted with HHS 100th Reunion graphics. Because site visitors were purchasing Reunion passes, it was anticipated that they would be interested in buying Reunion souvenirs over non-customized products. The chocolates were offered as a third alternative for three reasons: they provided an alternative to a Reunion souvenir that was consumable, Strahilevitz and Myers (1998) used chocolates in their experimentation with donation incentives, and no minimum order quantity was required from the supplier. This was appealing because it eliminated the risk of having extra inventory at the end of the Reunion.

The \$5 amount was chosen because it would represent a 16.7 percent increase in amount spent for a consumer who is buying the \$30 blue pass, an 8.3 percent increase in amount spent for a consumer who is buying the \$60 gold pass and a 4.5 percent increase in amount spent for a consumer buying the \$110 principle's pass. The \$5 price point allowed flexibility to offer quality products and an amount high enough to have very different impacts on the expected sales amounts of \$30, \$60 and \$120.

4.1 Manipulations

The add-on item was presented in two conditions to test the mode of presentation hypothesis. Either the customer was presented with the offer embedded on the check out page above the shopping cart contents or in a popup containing only the impulse offer. As discussed previously, the presentation mode was randomly assigned by a script on the web server. If the customer purchased the impulse offer, it was added to the shopping cart, the checkout page was refreshed and the same condition was generated again. That is, if the popup condition was executed initially then the popup would appear again. The consumer closed the popup window to continue with the checkout process and pay for the purchase.

An additional manipulation was added that tested whether providing a reason to purchase the item would influence the likelihood of impulse purchases. Specifically, participants in each of the two presentation conditions (pop-up vs. embedded on the checkout screen) saw that a portion (\$1.00) of the purchase of the \$5 item would be donated to the HHS Stepping Stone Foundation. This was

50

⁵ See "APPENDIX C –HHS Reunion Checkout Page Condition #1" for an example of the offer embedded on the checkout page or see "APPENDIX D – HHS Reunion Checkout Page Condition #2" for an example of the offer in a popup format.

expected to provide an additional reason for purchasing the item and increase the proportion of participants who buy the add-on item.⁶

The consumer confirmed the content of the shopping cart and accuracy of the contact information by clicking on the "Checkout" button to proceed to pay for the order. Following payment the user was asked to answer demographic questions.⁷ No direct compensation was offered to participants; however, they were encouraged to fill out their demographic information with the incentive of being entered into a draw for HHS Reunion souvenirs. Once consumers answered and submitted this information, their contact information was collected on a voluntary basis for the draw. Following this page, the process was complete and a page displayed that confirmed the success of the transaction.

⁶ See "APPENDIX E – HHS Reunion Checkout Page Condition #3" or "APPENDIX F – HHS Reunion Checkout Page Condition #4" for an example of the offer with the donation condition. In contrast, see "APPENDIX C –HHS Reunion Checkout Page Condition #1" or "APPENDIX D – HHS Reunion Checkout Page Condition #2" for examples of the offer without the donation condition

⁷See "APPENDIX B – Demographic Survey" for a complete list of the demographic questions.

CHAPTER 5 RESULTS & DISCUSSION

Data was collected on actual purchase transactions on the HHS Reunion website from March 13, 2004 to May 19, 2004. During this period 60,413 pages were viewed, 3,488 unique visitors attended the site and 771 transactions were approved and processed. Of these, 349 orders were submitted in person or by mail and entered by the HHS Reunion Committee. These transactions were processed using a separate interface and were not exposed to the impulse purchase manipulations. Of the 422 remaining purchase transactions, two of these transactions were test transactions that were performed to confirm that the data collection and online payment processing were functioning properly. As a result, these two records were removed from the data set leaving 420 records. These 420 records were used to test the second and third hypotheses.

Hypothesis one required the use of the demographic submissions and no response was recorded for 108 consumers. As a result, these records were eliminated from the data set which was reduced to 312 records. Upon further inspection of the demographic responses, one submission indicated that he was age 18 or less with 47 children under the age of 12 and 74 people living in the household on an income of under \$20 000. This record was also eliminated from the data set for the first hypothesis leaving 311 purchase transactions that

were used in the data analysis⁸. Table 1 shows their means, standard deviations, and correlations of the control variables for the 311-record data set.

Table 1 – Descriptive statistics and correlations of control variables

Variable	Mean	Standard Deviation	Amount Spent	Age	Household Income
Amount spent	90.77	48.36			
Age	48.4	9.8	0.282		
Household Income	77	21.17	0.1636**	-0.0753	
Gender	Male n=128 Female n=183		-0.2096***	-0.1107	-0.2361***
* p < .05	** p < .01 *	*** p < .001			

5.1 Responsiveness to Money Spent

Initially, the logistic regression was run with the full model which used whether or not the impulse was purchased as the independent variable and amount spent, age, household income and gender as dependent variables. The results of the logistic regressions are summarized in the second column in Table 2. In this initial model, age and gender were not significant. Therefore, amount spent and household income were included as dependent variables in the final model. The third column of Table 2 contains the results of this second and final model with the two dependent variables.

⁸ This record was not eliminated in the first data set that was used for hypothesis two and three because the purchase was valid and therefore the purchase data was accurate and the demographic information was not required for this calculation.

Table 2 - Results of Regression - 2 models

Variable	Initial Model	Final Model			
Amount spent	0.0123**	0.0114**			
·	[0.0045]	[0.0041]			
Age	0.1752				
	[0.2452]				
Household Income	-0.0237*	-0.0253*			
	[0.0114]	[0.0111]			
Gender	0.3594				
	[0.5719]				
Constant	-3.750	-2.101			
	[2.029]	[0.8162]			
*n < 05 $**n < 01$ $***n < 001$					

In the final model, the amount spent had a significant effect on and a positive relationship with the likelihood to purchase (t=2.79, p<.01) which is consistent with my hypothesis. As the amount spent online during the transaction increases, the likelihood to purchase the impulse item also increases. Although household income also had a significant effect on the likelihood to purchase as expected, it was surprising that this effect had a negative relationship (t=-2.28, p<.05). Even with this negative relationship, the slope for each of the income brackets is positive as predicted which indicates that as more is spent on the site, the likelihood of the impulse purchase increases.

Figure 4 is a graphical representation of the predictions from the model rather than the actual data and graphs three representative household income categories instead of all categories. Each line on the graph is representative of one income category and each line is positive; that is, as the amount spent increases, so does the likelihood of an impulse purchase. The graph reflects the negative relationship between the household income and likelihood to make the impulse purchase; the likelihood of making the impulse purchase decreases as the income increases. That is, the \$35,000 income bracket is more likely to make an impulse purchase than the \$65,000 or \$95,000 income bracket.

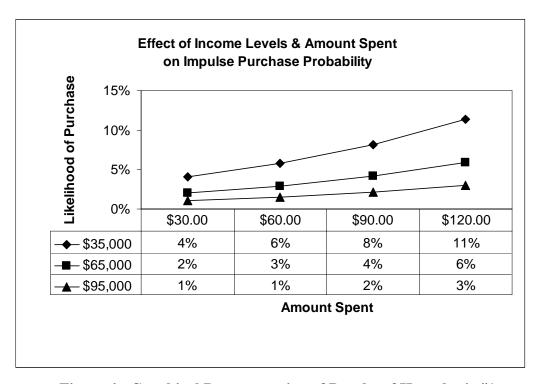


Figure 4 - Graphical Representation of Results of Hypothesis #1

The results indicate that the more a consumer spends, the more likely they are to make an impulse purchase. A consumer who spends \$120, with an income of \$35,000 has a likelihood of impulse purchase of 0.11 or 11 percent. A consumer with an income of \$35,000 who spends \$60 instead of \$120 has a likelihood of impulse purchase of 0.06 or 6 percent. A consumer with an income of \$95,000 who spends \$120 has a likelihood of impulse purchase of 3 percent.

Although household income also had a significant effect on the likelihood to purchase as expected, it was surprising that this effect had a negative relationship. This indicates that as the consumer's household income increases, they are less likely to make an impulse purchase. This is counter intuitive as it was expected that higher household incomes would yield a higher likelihood to purchase the impulse item. While purely speculative, one theory that could potentially explain why this occurred is that higher income consumers do not buy 'junky' \$5 items. They are more likely to buy a higher priced, higher quality souvenir than a small token souvenir. The opposite may also be true. Lower income consumers may be more likely to buy a \$5 item because this is within their budget. An alternative way to explain these results is that the higher income consumer saw no value in the items in the add-on offer. Perhaps those consumers in the high income range had no use for a mousepad, eyeglass clips

or truffles. This could have been a case of offering items that this group of users had no interest in.

5.2 Mode of Presentation & Reason to Purchase

The results for the mode of presentation and reason to purchase manipulations are summarized together in Table 3. The first row in each cell indicates the percentage of consumers who made the impulse purchase and the second row of each cell contains the total number of participants exposed to each condition.

Table 3 - Mode of Presentation & Donation Conditions Results

Reason to	No	Donation	Total
buy	Donation		
Mode of			
Presentation			
Embedded in page	1.7% ^{a,b}	8.6% ^a	5.0%
	n = 116	n= 105	n = 221
Popup	7.5% ^b	5.7%	6.5%
	n = 93	n = 106	n = 199
Total	4.3%	7.1%	5.7%
	n = 209	n = 211	n = 420

Proportions of items with the same superscript differ at p < .05

The presence of a donation condition (the opportunity for \$1 to go to the Stepping Stone Foundation) was expected to be an effective factor in increasing the likelihood of an impulse purchase. Only 1.7 percent of the consumers purchased the impulse item when no donation was present and the offer was embedded in the page. As expected, when the embedded offer included a

donation, the purchase rate increased to 8.6 percent, resulting in a 6.9 percent increase overall (t(220)=2.3, p<.05).

It could be argued that the consumers who bought the impulse item did it in order to donate the \$1 to the charity. This is not a reliable explanation because all consumers were offered the option to donate money to the charity in \$1 increments without purchasing a souvenir.

The effect of the purchase frequency increasing as a result of the donation when the offer was embedded in the page did not occur when the offer was presented in a popup condition. When the offer was presented as a popup, 7.5 percent shoppers purchased the impulse item when there was no donation but when the offer included a donation, the purchase rate decreased to 5.7 percent. Given the effect of the donation when the offer was embedded in the page, it was expected that the manipulation that included the popup would have resulted in higher sales of impulse items considering that this is a combination of the two conditions. Although sales of 5.7 percent for the donation/popup condition represents a 4.0 percent increase from the condition where the offer is embedded without a donation (t(221)=1.6, p>.05), this result is lower than the adjacent cell where there is a popup and no donation. There is no reason why the popup made the donation less effective and it is surprising this result is so low because the effect should have been additive.

One possible explanation for why the combination of the donation and popup condition in one offer did not perform as well as the other conditions is due to the increased complexity of the popup when the donation condition was added. The donation condition required three extra lines of text to explain that \$1 would be contributed to the Stepping Stone Foundation. This increased the size of the popup in terms of its length and height may have resulted in a popup that was too large for the consumer to scan quickly and as a result, the consumer may have simply closed the popup and did not consider the offer. Therefore, designers should be sensitive to the size of popups in the future and be sure not to make them overwhelming. Since there is no reason for this manipulation to be less effective, this cell is not considered reliable and the analysis from now on will be restricted to consideration of the 'embedded in page' row and 'no donation' column, eliminating the popup/donation cell from further discussion.

The popup format was expected to be more effective at increasing the likelihood of the impulse purchase than the offer being embedded in the page. As mentioned above, only 1.7 percent of the consumers purchased the impulse item when the offer was embedded when there was no donation condition. As expected, when the no donation offer was presented in the popup format, the purchase rate increased to 7.5 percent, a 5.8 percent increase overall, t(208)=2.1, p<.05. For the mode of presentation results, only the no donation condition will be considered for reasons outline earlier pertaining to the donation/popup cell.

The positive results for the popup in the no donation condition shows support for the effect. In summary, when the offer does not involve a donation, the popup format is effective in encouraging the impulse purchase.

Given the strong dislike web users have for popups, one might expect that popups would not to be an effective method to increase the sale of impulse items. Consumers are increasingly being exposed to popups on the web and popup techniques have been misused by some web marketers as a desperate measure to get the attention of the consumer at any cost. Popups are windows that appear that the user has not requested. One site I visited launched at least one dozen popups containing links to mortgage companies, screensavers, pornography, free graphics, and retail sites. As I closed these windows, other windows were launched. It was difficult to close them all and it took a few minutes to deal with them. As a result, popups have received negative exposure and are not well liked among web users. Closing popups is becoming part of the routine for web users. As a result, it is amazing that the results indicate an increase of 5.8 percent as a result of presenting the offer in a popup format.

Users are so frustrated by popups that one popular technique has been developed to avoid them altogether. A "popup blocker" stops popups from opening and can be installed by users. In addition, browsers such as Netscape and Opera, have embedded popup blockers in their browser software. This creates a tremendous disadvantage to companies employing this marketing

technique because if a web user or browser employs a pop-up blocker, then the offer may not be seen at all!

In this experiment, popup blockers would have been ineffective because the popup was designed using a technique called layers. Layers offer web developers the same functionality of popups that the popup blockers ca not stop or control. Layers are essentially on top of the existing window but are not in a new window of their own. This new layer can be designed to look like a window by inserting window features such as a grey header bar with the close icon and a black outline designating the outside of the "window". This technique was used in this experiment to eliminate the possibility that a user would not be exposed to the offer due to a popup blocker.

In summary, these results indicate that by offering a donation, the sale of impulse items can be increased from 1.7 percent to 8.6 percent and that by presenting the offer in a popup format, impulse sales can be increased from 1.7 percent to 7.5 percent. These results are approaching Cobb and Hoyer's (1986) results that conclude pure impulse purchases accounted for 11.3 percent and 13.2 percent of purchases of toilet paper and coffee respectively. Initially these results appears to be a small effect however an 8 percent increase in sales can provide a significant increase overall in profitability if you consider that consumers spent over \$15 billion on the internet in 2002 in the US and Canada.

CHAPTER 6 SUMMARY

Impulse purchases are an important part of brick-and-mortar store sales. Sales of impulse items do not cannibalize planned purchases and require very little additional resources to make the sale (Eder, 2002; Iyer, 1989). This paper confirms that the amount spent on the website on other purchases had a significant positive effect on the likelihood to purchase an "impulse" item; the more a shopper spends on a website, the more likely they are to make an impulse purchase. This indicates that the mental accounting theory is consistent and applicable to the online purchasing environment.

The results of this research indicate that a popup is more effective at getting people to notice the offer as long as it is not too distracting or large. Consumers are very sophisticated shoppers and are becoming immune to many merchandising techniques. Brick-and-mortar stores use eye-catching displays and locate products at the checkout in order to encourage impulse buying. Online stores must present the data on the screen so that the consumer sees it. Getting people to notice the offer is the first step to getting the consumer to buy the item; if consumers do not see the offer, they ca not buy it. The popup is a presentation method that the shopper ca not avoid. As a result, presenting the offer in a popup format, as opposed to embedding it on the page, increases the likelihood of the impulse purchase.

Offering a reason to purchase is an effective way to increase impulse purchases. This research demonstrates that linking a \$1 donation to the impulse item, thereby providing a reason to purchase, increases the frequency of the impulse purchase. The donation offered consumers a reason to purchase the impulse item by tying a donation to the purchase. Consumers who purchased the impulse item with the promise of the \$1 donation to the Stepping Stone Foundation may have experienced a 'warm glow' or good feeling from the altruistic nature of this act because the \$1 contribution was made as a result of their actions.

These results provide evidence that impulse purchases could incrementally increase online sales without cannibalizing other products. As a result, impulse buying in the online environment is an important issue that should be studied further.

6.1 Advantages of the Online Environment

Online retailers have unique opportunities in selling impulse items due to their differences with their brick-and-mortar counterparts. For example, in the brick-and-mortar environment, heavy or awkward items are not typically impulse items because of the difficulty consumers envision moving it and getting it home. Heavy or awkward items may be more effective as online impulse items because all online purchases are delivered to the user and

therefore, the consumer would not have to worry about the weight or awkward nature of items. As a result, the online environment may reduce restrictions in the types of products that can be offered for impulse.

Online retailers also face challenges as a result of differences between them and the brick-and-mortar retail environments. For example, in the online environment staff are not involved in the purchase; no one is available to encourage or suggest add-on items as in the brick-and-mortar retail environment. As a result, influencing the impulse purchase maybe a more difficult task online.

In the brick-and-mortar environment, shipping or delivery costs are not usually a concern because the consumer takes possession of the impulse item immediately and therefore takes responsibility for its transportation. When a consumer purchases products from an online vendor, delivery and shipping costs are a necessary evil that ultimately increase the cost of the purchase. As a result, the additional cost of delivery may be a consideration that would hinder the effectiveness of an impulse offer online because the consumer is concerned with the additional expense. In the experiment for this research, there was no delivery charge because the orders were picked up at the Reunion. It would be interesting to determine whether or not shipping costs have a negative effect on impulse purchases in the online environment.

The delay of receiving the purchase may dissuade shoppers from making impulse purchases online. Many brick-and-mortar impulse purchases are a result of the consumer satisfying an immediate demand or desire whether it is for eating, reading or using the impulse item. The delayed receipt of the object will reduce the likelihood of online impulse buying because the consumer does not take possession of the item immediately and therefore ca not fulfill an immediate need. Since the impulse item can not satisfy an immediate need, the consumer may be less willing to buy it on impulse. For example, when a consumer is standing in line waiting to pay for their groceries, the sight of gum at the checkout may make their mouth water inducing them to buy the item on impulse. Items that have a high level of savoring which add to the value of the item create anticipation and increase the value of consumption (Loewenstein, 1987; Loewenstein & Thaler, 1989).

Effective online impulse items may include products where anticipating the receipt of the item is as good as receiving the item. For example, an art kit purchased from a specialty site may involve anticipating its arrival although the consumer knows that they will not receive it for a few days. The important part is not getting the item, rather it is anticipating its arrival. During an online transaction, the consumer may see the offer of gum, but the knowledge that they have to wait for the item to be delivered before they can indulge in this experience discourages the impulse gum purchase. They will enjoy the

experience faster if they buy gum next time they are shopping or make a special trip to the convenience store to satisfy this immediate desire. In the online environment, immediate gratification will not be generated from the receipt of the item. Instead, the focus must be altered to take into consideration that the delayed receipt and consumption for certain products can create anticipation which encourages the impulse purchase.

6.2 Limitations & Future Work

One limitation of this experiment was that the audience represented a restricted sample of the population. This was a not-for-profit website for a high school reunion where the donation was targeted to a school-oriented fund and therefore it is possible that these consumers were more amenable to this donation offer because it was meaningful to them. In essence, the donation was targeted to something that was related and very salient to each consumer. As a result, in an online retail store it may be very difficult to find an appropriate and meaningful cause to appeal to. Giving the consumer a reason to purchase through a donation condition that is not as well aligned, targeted or salient to each consumer may not perform as well as in this experiment.

This research was conducted on a website for a not-for-profit organization focusing on retailing event tickets and souvenirs. This research could be extended into different sectors in order to determine whether or not the

results of this research are consistent in other sectors. For example, this experiment could be implemented in a for-profit retail website, a not-for-profit website that sells products rather than event passes, or on a website that sells services rather than products.

This research could be extended to consider the eight factors that transfer from brick-and-mortar to the online environment to determine to what extent they are influential in the online environment. This could include researching the properties of effective impulse items in the brick-and-mortar and online stores to determine whether or not good impulse items are different in the two environments. For example, past research indicates that products that are large, heavy and/or awkward are not good impulse items in the brick-and-mortar environment. It is possible that these are good impulse items in the online environment because consumers do not have the responsibility or hassle of transporting the purchases since most online purchases are delivered. In addition, hedonic rather than utilitarian items have shown to be more effective impulse items in the brick-and-mortar environment. Does this hold true in the online environment? Research on the factors that contribute to effective online impulse items would be very interesting as there are many properties and characteristics to consider

6.3 Conclusions

This paper examined impulse purchasing during online transactions with respect to the amount spent on the site. Consistent with mental accounting and the psychophysics of pricing, the results indicate that the likelihood of an impulse purchase is positively correlated with amount spent on the website. Thus, the more one spends on a website the more likely they are to make an impulse purchase.

This paper also studied whether the mode of presentation and offering a reason to purchase influenced the likelihood of impulse buying. The results of this experiment showed that presenting the impulse offer in a popup format and including a reason to buy in the form of a donation to a charity are effective merchandising techniques that increase the frequency of impulse purchases.

Between 2000 and 2003, Canadian online sales have grown by a compound annual growth rate of 58 percent per year reaching \$5.5 billion in 2003. If this trend continues, online sales in 2005 will easily exceed \$15 billion. In a \$15 billion industry, even a 1 percent increase in sales as a result of impulse buying amounts to \$150 million in additional sales. With an understanding of the factors that influence impulse purchases in the online environment and minimal additional investment, online retailers can capitalize on this lucrative opportunity.

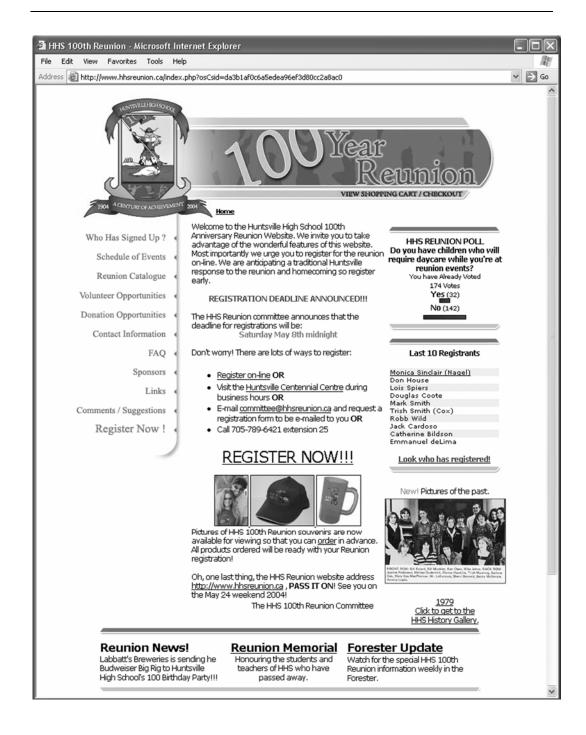
REFERENCES

- Agee, T., & Martin, B. A. S. (2001). Planned or Impulse Purchases? How to Create Effective Infomercials. *Journal of Advertising Research*, 35-42.
- Aspillaga, M. (1996). Perceptual Foundations in the Design of Visual Displays. *Computers in Human Behavior*, 12(4), 587-600.
- Baumeister, R. F. (2002). Yielding to Temptation: Self-Control Failure, Impulsive Purchasing, and Consumer Behavior. *Journal of Consumer Research*, 28, 670-676.
- Bayley, G., & Nancarrow, C. (1998). Impulse purchasing: a qualitative exploration of the phenomenon. *Qualitative Market Research*, 1(2), 99-117.
- Beatty, S. E., & Ferrell, M. E. (1998). Impulse Buying: Modeling Its Precursors. *Journal of Retailing*, 74(2), 169-191.
- Bellenger, D. N., & Robertson, D. H. (1978). Impulse buying varies by product. *Journal of Advertising Research*, 18, 15-18.
- Cobb, C. J., & Hoyer, W. D. (1986). Planned Versus Impulse Purchase Behavior. *Journal of Retailing*, *6*2(4), 384-409.
- Commerce, U. D. o. (2003). eMarketer.
- Desmet, P., & Renaudin, V. (1998). Estimation of product category sales responsiveness to allocated shelf space. *International Journal of Research in Marketing*, *15*, 443-457.
- Dhar, R., & Wertenbroch, K. (2000). Consumer choice between hedonic and utilitarian goods. *Journal of Marketing Research*, *37*(1), 60-71.
- Drèze, X., Hoch, S. J., & Purk, M. E. (1994). Shelf management and space elasticity. *Journal of Retailing*, 70(4), 301-326.
- Eder, R. (2002). Pharmacy checkstand is prime spot to encourage impulse purchases. *Drug Store News, 24*(15), 27.
- Ellison, J. (2003). *E-commerce: Household shopping on the Internet*. Retrieved August 24, 2004, 2004
- Ellison, J., Earl, L., & Ogg, S. (2001). Internet Shopping in Canada: Statistics Canada.
- Heath, C., & Soll, J. (1996). Mental Budgeting and Consumer Decisions. *Journal of Consumer Research*, 23(1), 40-52.
- Henderson, P. W. (1992). Mental Accounting and Categorization. *Organizational Behavior and Human Decision Processes*, *51*, 52-117.
- Huber, J., Payne, J. W., & Puto, C. (1982). Adding Assymmetrically Dominated Alternatives Violations of Regularity and the Similarity Hypothesis. *Journal of Consumer Research*, *9*(1), 90-98.
- lyer, E., S. (1989). Unplanned Purchasing: Knowledge of Shopping Environment and Time Pressure. *Journal of Retailing*, *65*(1), 40 57.
- Jones, M. A., Reynolds, K. E., Weun, S., & Beatty, S. E. (2003). The product-specific nature of impulse buying tendency. *Journal of Business Research*, *56*(7), 505-511.
- Kahneman, D., & Tversky, A. (1979). Prospect Theory: An Analysis of Decision Under Risk. *Econometrica*, 47(2), 263-291.
- Kahneman, D., & Tversky, A. (1984). Choices, values, and frames. *The American Psychologist*, 39(1984), 341-350.

- Kivetz, R., & Simonson, I. (2002). Earning the Right to Indulge: Effort as a Determinant of Customer Preferences Toward Frequency Program Rewards. *Journal of Marketing Research*, 39(2), 155-170.
- Koci, R. (2002). You make me feel like shopping!: impulse buying isn't just for bored DIYers. *Hardware, Merchandising, Building Supply Dealer, 114*(4).
- Kollat, D. T., & Willet, R. P. (1967). Customer Impulse Purchasing Behavior. *Journal of Marketing Research, IV*(February 1967), 21-31.
- Kotler, P. (1991). *Marketing Management* (Seventh ed.). New Jersey: Prentice-Hall, Inc. Koufaris, M. (2002). Applying the Technology Acceptance Model and Flow Theory to Online Consumer Behavior. *Information Systems Research*, 13(2), 205-223.
- Kumar, M., Rangachari, A., Jhingran, A., & Mohan, R. (2000). *Sales Promotions on the Internet*. Yorktown Heights, NY: IBM Research Division.
- Laroche, M., Pons, F., Zgolli, N., Cervellon, M.-C., & Kim, C. (2003). A model of consumer response to two retail sales promotion techniques. *Journal of Business Research*, *56*, 513-522.
- Lee, J., Podlaseck, M., Schonberg, E., & Hoch, R. (2001). Visualization and Analysis of Clickstream Data of Online Stores for Understanding Web Merchandising. *Data Mining and Knowledge Discovery*, *5*, 59-84.
- Lee, J., Podlaseck, M., Schonberg, E., Hoch, R., & Gomory, S. (2000). Understanding merchandising effectiveness of online stores. *Electronic Markets*, *10*(1), 20-28.
- Lee, P.-m. (2002). Behavioral Model of Online Purchasers in E-Commerce Environment. *Electronic Commerce Research*, 2, 75-85.
- Lee, W., & Benbasat, I. (2003). Designing an electronic commerce interface: attention and product memory as elicited by web design. *Electronic Commerce Research and Applications*, 2, 240-253.
- Limited, C. C. (2003, October 30, 2003). Sweet temptation leaves sour taste. *Marketing Week*, 23.
- Ling, M. C.-H., & Lawler, K. (2001). Internet Advertising, Game Theory and Consumer Welfare. *Electronic Commerce Research*, *1*, 169-181.
- Loewenstein, G. (1987). Anticipation and the valuation of delayed consumption. *The Economic Journal*, *97*(387), 666-684.
- Loewenstein, G., & Thaler, R. (1989). Anomalies: intertemporal choice. *Journal of Economic Perspectives*, *3*(4), 181-193.
- Miller, R. (2002). In-store impact on impulse shoppers. Marketing, 27-28.
- Nielsen, J. (2000). Designing Web Usability. Indianapolis, IN: New Riders Publishing.
- Palmer, J. W. (2002). Web Site Usability, Design, and Performance Metrics. *Information Systems Research*, *13*(2), 151-167.
- Phillips, H., & Bradshaw, R. (1993). How customers actually shop: customer interaction with the point of sale. *International Journal of Market Research*, *35*(1), 51-62.
- Piron, F. (1991). Defining Impulse Purchasing. *Advances in Consumer Research, 18*, 509-514.
- Rook, D. W. (1987). The Buying Impulse. *Journal of Consumer Research, 14*, 189-199. Shafir, E., Simonson, I., & Tversky, A. (1993). Reason-Based Choice. *Cognition, 49*, 11-36.
- Shapiro, M. F. (2001). Impulse Purchases. *National Petroleum News*, *93*(7), 40-42. Simonson, I. (1989). Choice based on reasons: the case of attraction and compromise effects. *Journal of Consumer Research*, *16*, 158-174.
- Stern, H. (1962). The Significance of Impulse Buying Today. *Journal of Marketing*, 26(2), 59-62.

- Strahilevitz, M., & Myers, J. G. (1998). Donations to Charity as Purchase Incentives: How Well They Work May Depend on What You Are Trying to Sell. *Journal of Consumer Research*, 24, 434-446.
- Thaler, R. (1980). Toward a Positive Theory of Consumer Choice. *Journal of Economic Behavior & Organization*, 1(1), 39-60.
- Thaler, R. (1985). Mental Accounting and Consumer Choice. *Marketing Science*, 4(3), 199-215.
- Thaler, R. (1999). Mental Accounting Matters. *Journal of Behavioral Decision Making*, 12(3), 183-206.
- Tol, B. v. (2002). Electronic commerce and technology. Ottawa: Statistics Canada.
- Tol, B. v. (2003). Electronic commerce and technology. Ottawa: Statistics Canada.
- Tol, B. v. (2004). *Electronic commerce and technology*. Retrieved August 24, 2004, 2004
- Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, *211*(1981), 453-458.
- Verplanken, B., & Herabadi, A. (2001). Individual differences in impulse buying tendency: feeling and no thinking. *European Journal of Personality*, *15*, 71-83.
- Wilkinson, J. B., Mason, J. B., & Paksoy, C. H. (1982). Assessing the impact of short-term supermarket strategy variables. *Journal of Marketing Research*, 19, 72-86.

APPENDIX A – Huntsville High School Reunion Index Page



APPENDIX B - Demographic Survey

The following survey appeared following the payment process during the online purchase transaction.

Demographic Information:

Please assist us in collecting demographic information about attendees. This information will not be stored with your personal contact information. It will assist the reunion organizers in their final planning in areas such as music selection, daycare requirements, licensed versus non-licensed entertainment, etc.

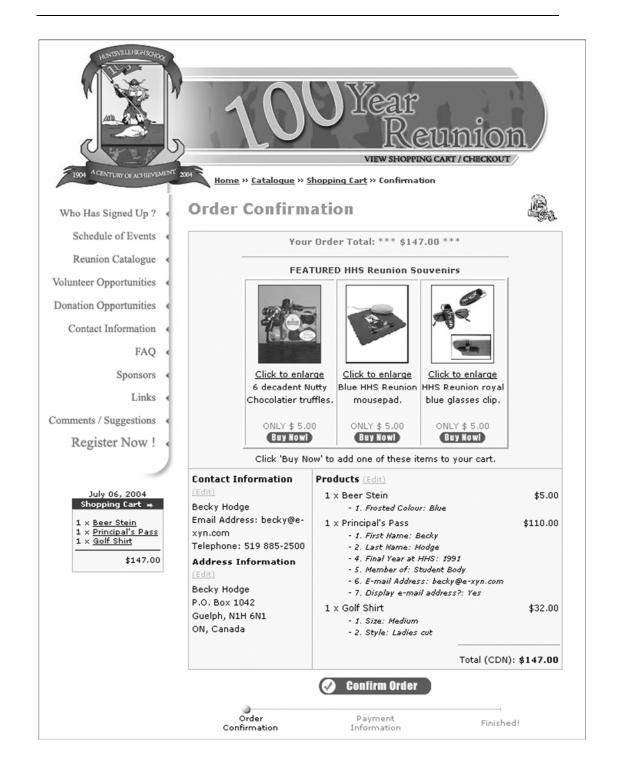
1. How old are you? (Choose one)
☐ 18 or under
□ 19 – 24
$\Box 25 - 34$
□ 35 − 44
□ 45 − 54
□ 55–64
☐ 65 or older
2. How many children do you have?
12 and under
13 and older
none
3. Would you utilize on-site daycare if it were available at the reunion? (Choose one)
□ Yes □ No

4. How many people live in your household*?
* Includes people living under the roof who contribute to the household income or those who are supported by the household income
5. When do you normally return to Huntsville each year? (Choose all that apply)
☐ May 24 th long weekend
☐ Spring
□ Summer
□ Fall
☐ Winter
☐ It's been a while
☐ Not applicable, I live in area
6. While attending the reunion, where will you be staying? (Choose one)
☐ With family or friends
☐ Hotel/Motel/Resort
☐ Not applicable, I live in area
7. For the Reunion, I will be staying in Huntsville for: (Choose one)
□ one night
□ weekend
☐ longer than weekend
☐ Not applicable, I live in area
8. What is your marital status? (Choose one)
☐ Single
☐ Common law / Married
☐ Divorced / Widow

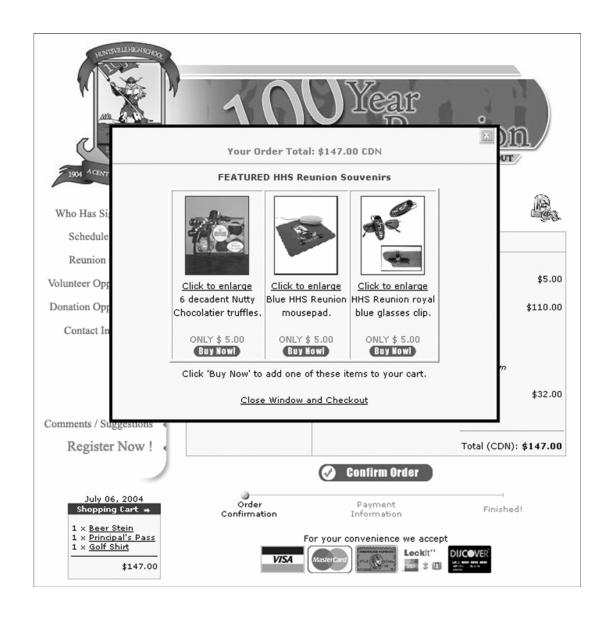
9. What is your household income? (Choose one)
☐ Under \$ 20 000
□ \$ 20 001 - \$ 30 000
□ \$ 30 001 - \$ 40 000
□ \$ 40 001 - \$ 50 000
□ \$ 50 001 - \$ 60 000
□ \$ 60 001 - \$ 70 000
□ \$ 70 001 - \$ 80 000
□ \$ 80 001 - \$ 90 000

□ over \$ 90 000

APPENDIX C -HHS Reunion Checkout Page Condition #1



APPENDIX D – HHS Reunion Checkout Page Condition #2



APPENDIX E – HHS Reunion Checkout Page Condition #3



APPENDIX F - HHS Reunion Checkout Page Condition #4

