Executive Summary
Over the two last decades, we have seen an ongoing debate as to whether actions are regretted more than inactions. Without taking sides as to which type of regret is more potent, we wish to extend this research by focusing our attention on the effects of inaction regret in the realm of consumer behavior, an area within the research stream that, to our knowledge, has yet to be investigated.

In studies of inter-temporal choice, people have been shown to have time-inconsistent preferences (Ainslie, 1975; Lowenstein & Elster, 1992). That is, even when alternatives stay the same, people change their preferences as time passes, and as the time of experiencing outcomes draws nearer, people may shift their preferences in favor of smaller but more immediate rewards over more remote but larger rewards (Karlson, 2003). Given limited economic resources, making one purchase in the present may prohibit future consumption of an unknown but potentially equal or more attractive purchase in the future. At the same time, forgoing an attractive consumption opportunity which may not present itself again can instill regret. When making consumer decisions we try to predict the level of future regret that will be experienced if we commit to buying the product, service or experience, and how much regret we will suffer if we walk away from it. “When an individual thinks about a counterfactual in advance, the motivation to avoid this negative affect influences behavioral choices” (Gleicher et al., 1995, p. 295; see also Roese and Olson 1995, p. 21). But how accurate are we in these predictions of future regret for forgoing a tempting purchase for economic reasons? Also, little is known about how one’s disposition at the time of the decision to forgo highly desired yet forgone purchases will affect the level of regret. Does an impulsive shopper who painfully restrains him/herself from making the purchase suffer more regret over the missed opportunity? Does a strict mental-budgeter look back on life and wish he/she had ‘loosened up’?

Scope and Objectives of the Project
We will investigate the following: (1) the factors that will have an impact on flexibility of the mental budget that a consumer has pre-set, (2) the factors that will increase the violations of a given budget, as a control mechanism, and (3) the degree of regret for forgone desired purchases (inaction) experienced by impulsive risk-seeking type personalities versus calculated risk-averse types, and its impact on the budgeting, booking and posting of future purchases.
Contribution (Theoretical and/or Applied)

Researchers in the fields of consumer behavior and decision making spend the majority of their time analyzing instances where people faced with an opportunity to consume a product, service or experience chose to act on the scenario. Some research has looked at consumers choosing one alternative over one or several others, but to our knowledge no research has been conducted to study the regret a consumer may experience over the many instances where he/she decided not to act and passed on the consumption opportunity all together. And so, while we have a decent understanding of cognitive dissonance (any discrepancy between expectations and actual product performance will be assimilated by the consumer through the adjustment of his/her evaluations of the product congruent with his/her prior expectations, Festinger, 1964; Korgaonkar & Moschis, 1982), we are far less educated about the reverse (regret for inaction). As consumer choice has been increasing at a phenomenal speed from one decade to the next, there has never been more opportunity for regret. “One of the difficulties of modern life is coping with all of the choices that are available. With a greater range of choice comes increased opportunities for regret, and so a related problem with modern life is how to minimize or cope with the experience of regret.” (Gilovich and Medvec, 1994)

In terms of an applied contribution, marketing managers need to understand both why consumers buy their product and why those who came close to buying it chose not to in the end. It is also interesting for them to know whether those consumers who were tempted by their product but decided against buying it regret the decision not to have made the purchase. Armed with this information, marketing managers can craft stronger and more convincing messages for consumers not to hesitate and pass up special purchase opportunities, warning that they will likely regret forgoing the purchase.

Conceptual Foundation

Mental Budgeting:
Heath and Soll (1996) show how budget setting and expense tracking alter consumer choice, leading people to over-consume some goods and under-consume others. Because budgets are set before consumption opportunities arise, they sometimes overestimate or underestimate the money required for a particular account. Also, as people track their expenses, expenses that are easy to categorize – those that are more typical examples of their categories - will be the most subject to the rigors of budgeting.

Ran Kivetz (1999) found evidence that buying and consuming luxury good tends to call for reasons and justification, and can evoke intra-personal conflict that might be resolved with the aid of mental accounting. However, he also found that focusing on reasons can lead to discrepancies between decisions and consumption experiences, preference intransitivity, and unconventional choices. According to Kivetz, reason-based choice and mental accounting may work together, as when reasons help to determine the matching of different mental accounts. Shafir, Simonson, and Tversky’s reason-based choice conception (1993) supports this notion as it seeks to explain consumer preferences based on reasons that are constructed to justify decisions. Objective rules and rationales loom larger in the choice process than in the consumption experience, at which time people tend to focus on feelings and subjective experiences (Hsee and Shafir, 1999). Kivetz (1999) postures that the reasons or rationales which guided a consumer’s choice may become irrelevant or even regretful at the time of the actual consumption. He conceptualizes that people have two different scales on which they value options: a pre-hoc scale used for choice, and a post-hoc scale used for assessing the experience in real-time or in retrospect (akin to the work of Kahneman and Snell (1990) and Kahneman and Varey (1991) on experience utility, decision utility, and predicted utility). Hsee and Shafir term these separate valuation scales as decision/consumption inconsistency, or prediction errors (when the decision-maker’s reasoning
Loewenstein (1996) explains that the decision-maker is influenced by “cold” reasoning, sensitive to his/her present state, while the consumer is affected by “hot” sensations during future activities and consumption.

Prelec and Loewenstein (1998) point out that when consumers make purchases they often experience an immediate pain of paying, which can weaken the pleasure derived from consumption or even prevent it altogether, therefore playing an important role in consumer self-control by counteracting the biases in the assessment of costs and benefits at the time of purchase that otherwise might lead to habitual overspending (Prelec, 1991; Prelec and Loewenstein, 1998). Thaler (1985) argues that hedonically pleasurable luxuries are often underconsumed for self-control reasons. Heath and Soll (1996) found that mental budgets cause people to underconsume in categories such as entertainment and apparel. However, over time consumers may come to recognize that such expenditures (within a reasonable range) can enhance their quality of life, in many cases without significantly affecting their ability to fulfill essential needs. Moreover, in some instances consumers can anticipate in advance their inability to wisely balance resources between hedonic and necessary consumption (Kivetz and Simonson, 1999).

Gourville and Soman (1998) found that when consumers were motivated to avoid consumption due to the unattractiveness of an activity, they appeared to strategically decouple transaction costs from consumption activity, so as to experience low levels of sunk-cost pressure. Conversely, when consumers were motivated to consume due to the attractiveness of an activity, they appeared to strategically couple costs and consumption, so as to experience high levels of sunk-cost pressure and thus increase the likelihood of consumption. They also conjecture that a parallel psychological process to payment depreciation may take place with respect to benefits that are consumed prior to payments. Furthermore, different products judged at the initial time of consumption as producing identical subjective utilities may later induce different degrees of pleasant memories due to such factors as a differential vividness (e.g., luxuries versus necessities). This hypothesis parallels Prelec and Loewenstein’s (1998) finding that people exhibit different time-discount rates across different domains.

In a study conducted by Kivetz and Simonson (1999), many respondents chose a luxurious in-kind prize over a cash amount of equal or even more monetary value, with a pre-commitment to hedonic consumption rationale. When Kivetz and Simonson asked respondents to anticipate potential uses of both choice options, an overwhelming majority predicted that they would use the cash for necessary consumption. This result clearly detected the presence of mental accounting, as cash that would otherwise be spent on necessities was converted, by virtue of a pre-committing choice, to hedonic consumption. Kivetz and Simonson point out the fact that the usage anticipation manipulation highlights people’s thriftiness because they predict spending the cash, which (more than) suffices to purchase the in-kind prize, on necessities. Kivetz (1999) demonstrates that this paradox supports the notion that the interaction between reasoning and mental accounting can help counteract the pain of paying and a tendency to underconsumer luxuries. Research by Snell, Gibbs and Varey (1995) suggests that consumers may have an intuitive grasp of some mental accounting principles and might be able to intentionally use mental accounting to resolve inner struggles to balance luxury and necessary consumption, or temptation and long-term interests (Bazerman et al. 1998). It has been shown that when people think about reasons for their decisions, the choices they eventually make can be different from when they make choices without thinking about reasons (Shafir, Simonson, and Tversky, 1993; Wilson and Scooler, 1991).
Regret:
In their development of regret theory, Loomes & Sugden (1982) defined regret (in a two-action situation) as a reflection by the individual on how much better his or her position would have been if the other action had been chosen, and its opposite (‘rejoicing’) as the extra pleasure associated with knowing that, as matters have turned out, he or she has taken the best decision. As Munier (1989) points out, in some sense this is a generalization of economic utility theory, where one allows ‘utility’ to depend not only on what consequences one gets but also on what consequences one might have got. For regret to occur, the performance of a forgone alternative may serve as the reference point for the comparison of what is with what could have been, and may also influence subsequent decision making (Tsiros, 1998). Tsiros and Mittal (2000) establish the mediating role of satisfaction on regret’s ability to affect behavioral intentions, as well as the moderating role that variables such as valence of the chosen outcome, reversibility of the chosen outcome, and type of purchase play on the level of regret experienced. Responsibility has been closely linked to regret (Simonson, 1992; Zeelenberg et al., 1996), and therefore changing the status quo is posited to generate more regret than retaining the status quo (Tsiros and Mittal 2000).

There is empirical evidence that regret is frequently experienced in everyday life. In a study of verbal expressions of emotions, Shimanoff (1984) found that regret was the most frequently named negative emotion. Landman (1993, p. 110) confirms that regret is a common, if not universal, experience.”
When looking back at purchase decisions, consumers often regret the choices they have made (Simonson, 1992). Research suggests that consumers might either avoid feedback (Janis and Mann, 1977) or avoid decisions altogether (Luce, 1998) as mechanisms of dealing with potential regret. Zeelenberg and Beattie (1997) found that decision making is not only affected by anticipated future regret, but experienced retrospective regret also has an influence on subsequent decisions, and can promote risk averse and risk seeking tendencies. In their experiment using the ultimatum game (Güth et al., 1982), Zeelenberg and Beattie’s participants who were experiencing retrospective regret from the first round chose options that shielded them from further regret during the second round, as a sort of emotion, or regret, management.

Because of the cognitive process of comparing outcomes to “what might have been”, regret has been called a counterfactual emotion (Kahneman & Miller, 1986). Avni-Babad (2003) explains that “every act that people perform (action) could have been not performed (inaction) and the thought of an alternative option to each is called counterfactual.” Literature on counterfactual thinking reveals a pronounced tendency for commissions to generate more regret than omissions (Gleicher et al., 1990; Kahneman & Miller, 1986; Kahneman & Tversky, 1982; Landman, 1987; Spranca, Minsk, and Baron, 1991). Byrne and McElney (2000) demonstrated that if the information provided for the consequences of an action and an inaction is the same, actions are regretted more in the short term and in the long term. Avni-Babad (2003) found that even if the information is not known, as long as they are both unknown, actions will be regretted more.

On the other hand, when people were asked to freely produce their own regret thoughts, the regret of inaction were as frequent and sometimes more common than the action regrets Avni-Babad (2002). In a series of studies, Gilovich and Medvec (1994) found that in looking back on their lives it is the things people have not done that generate the greatest regret. When these researchers asked subjects to describe their actual, most pressing regrets in their own words, the most common theme involved not having “seized the moment”. Studies conducted by Kinnier and Metha (1989) and Metha et al. (1989) which asked people what they would have done differently if they could live their lives over again also produced responses of inaction as the most common regret across all samples. Gilovich and Medvec (1994) propose that the discrepancy
between these two sets of data (counterfactual thinking versus lifetime regrets) is due to a consistent temporal pattern to the experience of regret: Actions generate greater regret in the short term, but its intensity tends to decline steeply with time. Inaction regrets, in contrast, may be more potent in the long run because the reduction in intensity that is typical of most emotions is offset by a set of psychological processes that bolster their severity.

**Key Methodological Choices**
Data will be collected from 200 undergraduate marketing students for Study 1 and 200 students enrolled in core and elective MBA classes at the John Molson School of Business for Study 2. The first experiment will examine the factors that will have an impact on flexibility of the mental budget that a consumer has pre-set, and the factors that will increase the violations of a given budget, as a control mechanism. The second experiment will examine the degree of regret due to a foregone desired purchase and its impact on the budgeting, booking and posting of future purchases. The second experiment will also measure the respondent’s level of risk tolerance and tendency towards impulsivity versus calculated planning. Implications of these findings and avenues for future research will then also be discussed.

**Work Schedule**
A pretest will be designed and conducted in March. Analysis of the pretest results will be completed in April. Data collection will begin in May. Results will be compiled throughout the summer months. Analysis and writing will hopefully commence in September and be completed by early 2005, in order to defend the MSc Thesis in early Spring 2005, and make corrections in time to graduate in June 2005.

**Detailed Budget with Estimated Quotes (listed below)**
# MASTER'S THESIS RESEARCH EXPENSES

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
<th>Quantity</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Computer Supplies:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Ink cartridges for Canon i560 printer</td>
<td>$35.00</td>
<td>2</td>
<td>$70.00</td>
</tr>
<tr>
<td><strong>B. Postage:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. return postage of questionnaire</td>
<td>$0.48</td>
<td>1000</td>
<td>$480.00</td>
</tr>
<tr>
<td>2. Feedback letter and report*</td>
<td>$0.48</td>
<td>400</td>
<td>$192.00</td>
</tr>
<tr>
<td><strong>C. Stationary and Office Supplies:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. JMSB letterhead (for cover and feedback letters)</td>
<td>$34.85</td>
<td>2 boxes</td>
<td>$69.70</td>
</tr>
<tr>
<td>2. JMSB envelopes (questionnaires, feedback letters)</td>
<td>$67.58/500</td>
<td>1000</td>
<td>$135.16</td>
</tr>
<tr>
<td>3. Labels for return envelopes (500 labels)</td>
<td>$4.00</td>
<td>4 packs</td>
<td>$16.00</td>
</tr>
<tr>
<td>4. Plain paper (for questionnaires and feedback reports)</td>
<td>$4.50</td>
<td>3 packs</td>
<td>$13.50</td>
</tr>
<tr>
<td>5. Plain envelopes for return of questionnaire (100/pack)</td>
<td>$5.00</td>
<td>5 packs</td>
<td>$25.00</td>
</tr>
<tr>
<td><strong>D. Printing and Photocopying</strong>:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Cover letters</td>
<td>$0.07</td>
<td>1000</td>
<td>$70.00</td>
</tr>
<tr>
<td>2. Questionnaires (8 pages to 1000 respondents)</td>
<td>$0.07</td>
<td>8,000</td>
<td>$560.00</td>
</tr>
<tr>
<td>3. Envelopes</td>
<td>$0.07</td>
<td>1000</td>
<td>$70.00</td>
</tr>
<tr>
<td>4. Return envelopes</td>
<td>$0.07</td>
<td>1000</td>
<td>$70.00</td>
</tr>
<tr>
<td>5. Feedback letters*</td>
<td>$0.07</td>
<td>400</td>
<td>$28.00</td>
</tr>
<tr>
<td>6. Feedback reports (3 pages)*</td>
<td>$0.07</td>
<td>1,200</td>
<td>$84.00</td>
</tr>
<tr>
<td>7. Miscellaneous (for literature review and compilation)</td>
<td>$0.07</td>
<td>500</td>
<td>$35.00</td>
</tr>
</tbody>
</table>

**TOTAL REQUESTED:** $1918.36

**NOTES:**

- * Assumes a response rate of 40%
- ** CGSA photocopier and MSC lab printer $0.07 per copy whether paper is provided or not
References:


