Product Reward Discounting on Variance of Time

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Abstract

Naturally individuals prefer to receive the rewards after purchasing a certain amount of products or services. Customer rewards program is an effective tool for the company to increase the customer loyalty. Luxury and necessity products can be offered as rewards under the product reward program. The main purpose of this study is to find out how individuals discount luxury rewards over necessity rewards in differences of time length. In this research empirical data has been collected from the students living in student apartments through the survey questionnaire. The respondents were given five time variances such as today, 1 month, 3 months, 6 months and 1 year to present their preferences between luxury and necessity products of equal value. After collecting and analyzing the survey data it was found that majority of the respondents prefers the necessity rewards in shorter period of time whereas in the longer delay they prefer the luxury rewards. Hence individuals discount luxury rewards over the necessity rewards of equal value in the variance of time.

Key Words: Customer Loyalty, Customer Reward Program, Immediate Reward, Delayed Reward, Discounting, Luxury Reward, Necessity Reward.

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Table of Contents

List of Figures

Chapter One: Introduction

1.1 Background

Nowadays people are familiar with delayed rewards in various circumstances. Sometimes individuals are rewarded for their service; sometimes organizations offer reward for the promotion of their business. Usually salary of an employee is paid at the end of the month, although he/she serves throughout the month. This is an example of delayed reward that individual deserves. Many business firms offer so called customer reward program where individuals are encouraged to continual purchase in order to get a reward in future. For example, buying air ticket from a particular airline adds point to individuals reward pool. After buying a certain number of tickets, traveler is rewarded with a free a free air ticket as a reward. Therefore it seems that delayed reward is not an uncommon affair in different states of our daily lives.

Our study on previous research presents that people discount delayed rewards for getting reward earlier. Individuals usually choose smaller reward value now over a larger reward value later. Besides, basic needs influence an individual in his preference. Additionally it is also identified that an individuals' discounting of delayed rewards depend on several other factors such as reward value, age, income level, culture, gender, etc.

1.2 Problem Discussion

Customer reward program is a traditional technique for selling products and inviting customers repeatedly in the same firm. Customers are influenced by the discounting of product. Marketing or customer relation department of each firm uses product reward discounting in different ways. Among them, discounting product on variance of time is the most popular one. Variance of time for customer rewarding can be classified as:

1. Instant (At the same time when a product is purchased. For example, three products can be offered with the value of two products)
2. Short term (Next time when another product is purchased)

3. Midterm after a product is purchased (for example, a product or service is free after each five times)

4. Long term (customers can collect points (for example, talk time for a phone service, miles for air ticket) by purchasing the product, further these points can be used)

These above classifications of customer rewards program impacts on the customer differently. There are some other parameters that influence the customers such as reward value (i.e., monetary (cash money) or non-monetary (directly consumable products)), product type (luxury product or necessary product), customer type (rich people or common people), geographical value of a product (i.e., some product in some country is used as necessity product; on the other hand same product is used as a luxury product in some other country), etc. Depending upon different circumstances, some customers prefer rewarding today rather than tomorrow while other prefers rewarding after a certain period for getting more benefit.

Generally, when the reward value is equal people prefer immediate one over the delayed one. Thus people have the tendency to discount the delayed rewards. This tendency is reversed when the value of the delayed reward becomes larger than that of the immediate reward. Green et al (1999) claimed in their research that individual might choose the immediate reward instead of delayed reward when the reward value is same in both scenarios. According to their argument, an individual would choose 50 SEK (Swedish Krona) reward today rather than 65 SEK reward after one year.

Wanjiang et al (2002) argued that culture has an influence on discounting of delayed rewards. Moreover, Green et al (1994) age of an individual has also an impact on reward program. In their research they claimed that children discount delayed reward more frequently than the adults. Estle et al (2007) found in their research that the reward value and probability of getting the reward also influence the customer to discount the delayed rewards. They also observed that certain reward is more preferable than the uncertain reward.

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It is well-known that winning customer loyalty is an important aspect for a business organization and for its profitability. Thus customer loyalty acts as long term customer prosperity (Zhang et al. 2010). Naumann et al. (2009) affirmed that there is a proportional relation between the customer satisfaction and the customer loyalty. They noticed two major reasons that relates to the customer loyalty, such as

i) A pleased customer is likely to persist in a company for a longer period in order to purchase relevant products.

ii) He/she (a satisfied customer) also plays a vital role for the business promotion of the organization by sharing his/her affirmative experience with other customers.

Gordon (2005) argued that a customer can be motivated by an effective reward program to visit again. They also stated customer reward program as an effective business promotional tool to increase sales. Further this idea can be more explicable by the research presented by Kim et al (2001). They present reward program offered by a business firm as a technique which boost customer loyalty providing lucrative incentives on the basis of the cumulative purchase of a particular product.

Sällberg (2010) in his research affirmed that "*a firm can choose between different purchases incentives for the customers to offer. A sales promotion and a customer reward program are two such incentives*"(p7). He stated further that "*while the reward in a customer reward program is delayed; requires repeated purchase, whereas the reward in a sales promotion is immediate and requires no further purchasing*"(p7). Additionally, he claimed that business organizations introduce customer reward program in various forms. Among them - individual reward or group reward, small reward or large reward, necessity reward or luxury reward are popular form of reward program.

In this regard we can mention Estle at al. (2007) research where they classified reward value into two: i) monetary (cash money) and ii) non-monetary (directly consumable products). The directly consumable product rewards may refer either luxury products or necessary products. When the rewards offered immediately, individuals like necessity rewards instead of luxury rewards of equal value. On the other hand the delayed rewards

are considered, luxury rewards are taken into account as spiritual or recreational factors are related to these products.

Kivetz and Simson (2002) in their research recognized that various spending requirements, for luxury products versus necessity products as a reward play a vital role for the customer's preference. Due to individuals limited budget, they are more concerned to consume necessity products such as food, gas, medicines, cloths, etc. instead of consuming luxury products such as wine, jewelry, pleasure trip, etc. After spending more money for the necessity products, people feel defensible for consuming luxury products. Therefore, individuals prefer necessities in the short run while they prefer luxuries for the long run.

The above mentioned discussion proves that discounting plays an important role in the so called rewards programs. Therefore, it is important to understand how people discount between monetary rewards and the product rewards under a delayed rewards program. Researchers have studied different characteristics of discounting in delayed reward program; but discounting of delayed luxury rewards over the necessity rewards have not been studied yet extensively. In this thesis, we have focused on discounting delayed rewards in terms of luxury products versus necessity products. Also, the goal of the thesis is to find out how the length of delays influences individuals' preferences.

The major focus or concentration of this study is presented below through a graph so that it could be easily understandable for the readers.
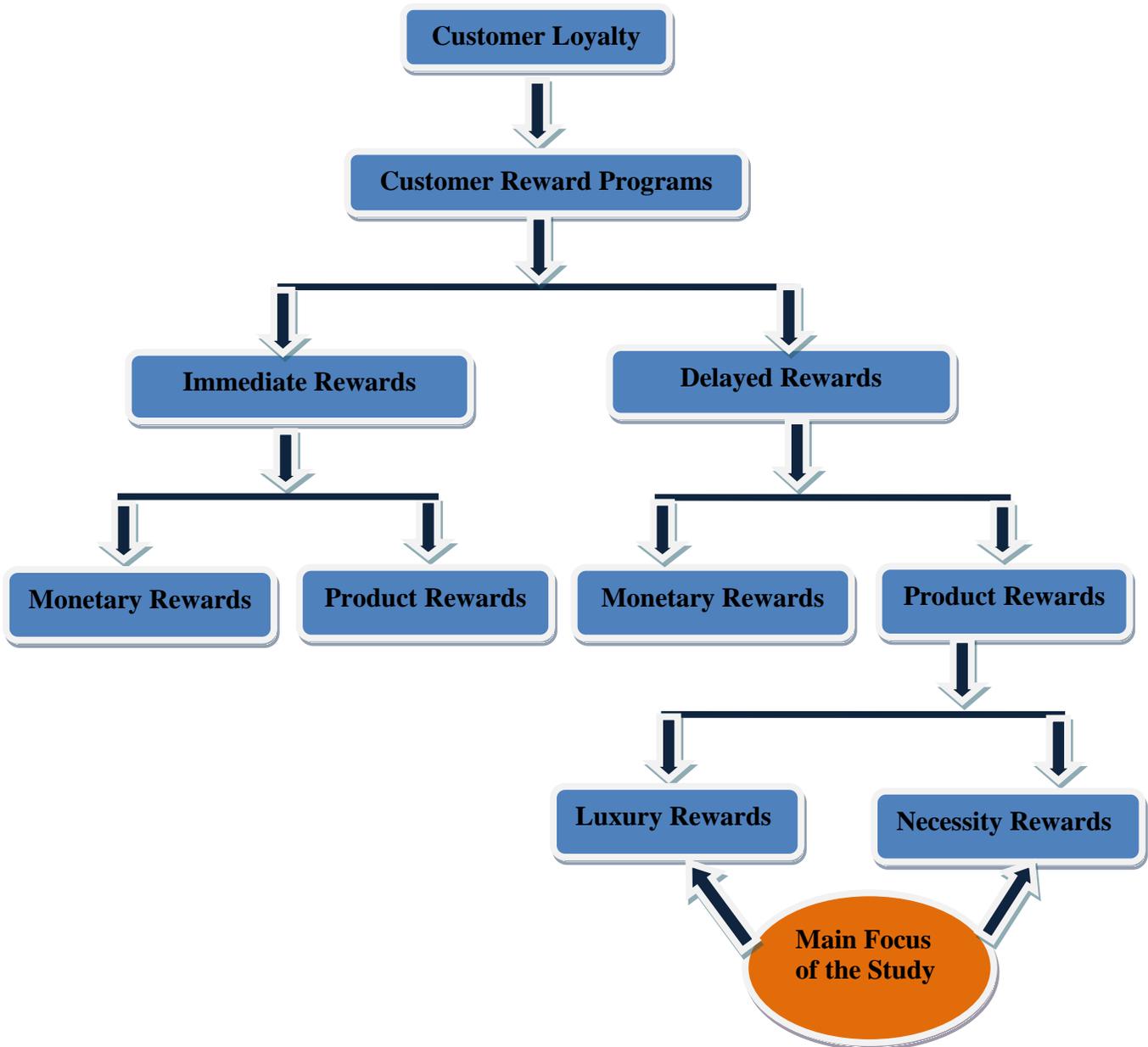
Figure 1: Overview of the study framework

1.3 Research Purpose

In the customer reward programs, people normally select a small amount of rewards which are available in the short term over a large amount of rewards that are available in the long term. Company offers necessity products as well as luxury products as rewards to encourage customers for further purchasing their products under the product rewards programs. Rewards those are offered in the future time which combines luxury and necessity product, individuals will choose the necessity products reward first in the

smaller time period. In contrast, individuals might prefer luxury reward in case of longer period of time. The main purpose of the study is to find out the exact scenario of product reward discounting in the real field on variance of time and to determine whether time preferences for necessity rewards is different from time preferences for luxury rewards.

1.4 Hypothesis

In this study two hypotheses have been considered on the basis of problem discussion. The arguments for those hypotheses are described below:

Hypothesis 1: *For rewards unfolding in the near future individuals discount luxury rewards more steeply than necessity rewards of equal value.*

Majority of the individuals have a limited budget for their expenses of every month. They need to spend money every month for some necessary expenses such as house rent, transportation, food etc. For this reason, individuals want to use their money in an appropriate way. Individuals are more concerned for fulfilling their basic needs than the excess needs. Hence, individuals first try to meet their basic needs. After these needs are fulfilled, individuals start to think about their excess needs such as luxury products. We believe that, time plays an important role in individual's choice between luxury items and necessity items. Our assumption is that individuals discount luxury rewards more steeply than the necessity rewards of equal value in the shorter length of delay.

McClure et al. (2004) asserted in their research that people desire the maximum quantity of rewards in a minimum degree of time under a delayed reward program. On the other hand, Kivertz and Simonson (2001) claimed that people discount the luxury rewards instead of necessity rewards of the equal value in a shorter period.

Hypothesis 2: *For rewards unfolding in the far future individuals discount luxury rewards less steeply than necessity rewards of equal value.*

When all necessary needs are fulfilled, individuals try to save some money for achieving their luxury needs. The idea is that individuals usually discount luxury products less steeply over the necessity products of equal value in the longer future. Kivetz and

Simonson (2001) added that for rewards recounting in the far future, people discount luxury rewards less steeply than the necessity rewards due to the pre-commitments of luxury rewards and other recreational factors.

It is a common tendency of people that they save money (after fulfilling their essential requirements) in order to meet up their luxury requirements. This trend influences people to discount luxury products less steeply instead of necessity products of same cost in larger length of delay.

1.5 Research Question

We have set the following objectives to find out in this research project:
- ➢ Which time frame is preferable for reward unfolding and how they influence on the product selling?
- ➢ What is the impact of product reward discounting on necessary product and/or luxury product in terms of time?
- ➢ How do geographical value, age, income etc variables influence the product reward discounting on variance of time?

Thus, the major research question arises to:

- Do individuals discount delayed luxury rewards more steeply than necessity rewards?

1.6 Limitations of the study

The available time for this study was limited that is why we did not get enough time to give deep concentration to others parts of the delayed product reward discounting. Journals and articles were not sufficient for this study particularly on the delayed luxury rewards and necessity rewards discounting. Respondents for this research were only students because it was very hard to reach other group of people from the busy Stockholm city. We have also faced some problems while analyzing collected data. In this research, respondents were given five different time variables but it took long time to finalize which way this survey data will be analyzed properly.

1.7 Thesis Outlook

This research is divided into five chapters. The first chapter introduces the research. That includes research background, problem discussion, study purpose and research question. The second chapter is titled previous studies which represents exact knowledge on the topic that means the review of literatures on this field. In this chapter customer loyalty, customer reward programs, different characteristics of discounting delayed rewards, luxury and necessity rewards etc. are discussed.

The third chapter contains information on methods of the research such as how to collect data and how to fix the sample size and location for the survey. Also this chapter shows how to analyze those collected data. In chapter four, the results of my empirical study is presented and analyzed. The fifth chapter is about the conclusion of the research. This chapter mainly describes the summary of the whole research.

Chapter Two: Previous Studies

2.1 Customer Loyalty

Customer loyalty is very important nowadays in competitive business environment. For the purpose of sustainable business development and maintaining the continuity of profit, a business firm must give proper concentration about the matter of customer loyalty issue. Customer loyalty represents the proposed behavior related to the service or the products of the company. This includes the possibility of future restitution of service contracts and the increase the number of new customers. Customer loyalty also gives positive word-of-mouth over the customers towards the company that helps to increase firm profitability (Andreassen and Lindestad, 1998).

Dick and Basu (1994) have mentioned that the central thrust of the marketing activities of a firm is often viewed in terms of development, maintenance or enhancement of customers' loyalty toward its products or services. On the other way it can be said that the loyalty programs are one of the most popular marketing strategies developed by firms across a brand range of industries (Furinto et al. 2009)

2.2 Customer Rewards Programs

Customer reward program is an effective tool for managing customers and making the customers loyal for the products or services. This program is mainly designed in a specific ways to keep customers happy about a particular brand or organization. An effective and appropriate customer reward program tends to make stronger lifelong relationships with their customers. Also this provides the customers some encouragement to use their hard earned cash money in a correct way and to maintaining a friendly relation between the company and customers. Customer's reward program also helps to become regular customer form the irregular customer (Finweek, 2006)

As said by Gordon (2005), an effective rewards program keeps customers coming back and also added that the smart way to stimulate sales is to consider initiating a customer reward program. To make it clear Kim et al (2001) have said that, reward programs, a promotional tool to develop customer loyalty that offer incentives to the customers on the basis of cumulative purchase of a given product or services from a firm.

Yi and Jeon (2003) have described the different aspects of customer reward programs. They have also mentioned that when a customer prefer immediate reward meanwhile the company have a preference to the delayed rewards for the purpose of building exit barriers, in that situation there may arise conflict of interests between the customers and the reward program sponsors. So therefore, the customer loyalty program may not be effective to the sponsors of the program and as well as the price promotion might not be better offer for the customers. Yi and Jeon (2003) have formulated a framework of the reward schemes which are presented below:

Timing of Reward

Type of Reward	Repeated and Immediate	Delayed
Direct	Instant Scratches, Membership program (Product- Related Reward)	Airline Frequent-Flyer, clubs, coupon and token (GM Card)
Indirect	Instant Scratches, Membership program (Non Product- Related Reward)	Multiproduct Frequent- Buyer clubs, (Fly Buys)

Figure 2: A modified framework of reward schemes

2.3 Immediate vs. Delayed Rewards

Rewards could be two types, instant or immediate and in the future time or delayed. Delayed rewards are those rewards which are not offered immediately or instantly. In this regard Keh and Lee (2006) mentioned that the satisfied customers prefer the delayed of greater value more than the immediate rewards of lower value. On the other hand dissatisfied customers prefers the immediate rewards of lower value than the larger value of delayed rewards.

Hariri et al (2006) in their research asserted that individuals normally like the larger rewards and like to receive that rewards in the shorter length of delay than the larger length of delay. They have also added that individuals' choices also differ significantly where there is an option to choose between smaller immediate rewards and larger delayed rewards.

According to Dowling and Uncles (1997) the magnetism of a reward program basically depends on the rewards value and offering time of the rewards. Rewards can be offered immediately or after a certain period of time. Those rewards can be given after the purchase of certain products or achieving points by purchasing and getting the rewards in future time that fulfill certain number of points. They have also pointed out that immediate rewards are commonly preferred by all.

2.4 Discounting Delayed Rewards

In accordance with Myerson and Green (1995), humans and other animals typically prefer the immediate rewards than the delayed rewards of equal amount in a reward program. They have also found in their study that the individuals choose the smaller and more immediate rewards because they discount the larger more delayed rewards. Therefore the present value of it may be less than that of the more immediate rewards.

In the case of decision making discounting plays an important role especially in the situations that involves self controls such as gambling, drug abuse, smoking and other impulsive behaviours (Green et al, 2007). Individuals are very much concerned about the reward programs in competitive business market. They may change their decision instantly on the basis of preferences towards offered the rewards. People often prefer the smaller rewards that are available immediately than the larger rewards that are available in future time. In consequence of this situation assumed that the value of the delayed rewards is discounted by the customers (Green et al, 2005)

Hariri et al (2006) in their research found that discounting delayed rewards or outcomes as function of their future availability which underlines the decision making of human being. They have also mentioned that discounting delayed rewards or the preference for the smaller immediate rewards over the delayed rewards of larger value is mostly associated with impulsivity. And also these are risk factors for addictive disorders such as pathological gambling, cigarette smoking, drug, alcohol abuse etc.

Previous studies have shown that discounting depends on some variables. These variables motivate individuals to discount delayed rewards over the immediate rewards. Discounting product rewards also related with some control variables. Some features or variable that influence discounting delayed rewards is described below:

2.4.1 Reward Value

When a company offers a reward to the customers then it could be monetary or non monetary rewards. In the monetary it is generally the cash money and non-monetary rewards are directly consumable products such as chocolate, cell phone etc. Estle et al (2007) observed that for delayed rewards monetary rewards were discounted less steeply than the directly consumable products. That means customer prefers the cash money over the products. They have also mentioned that when rewards are probabilistic there is no significant difference between the monetary and directly consumable product rewards.

2.4.2 Extent of Delay

The extent of delay or the duration of time for getting the rewards has a great impact on individual's preferences on purchasing product. Discounting of delayed rewards is also influenced by this factor as usually people like to get the reward shorter length of delay. Kirby and Herrnstein (1995) asserted that individuals and organization should maintain stable preferences across time for the delayed or future choices. Where there is no stability in time for getting rewards offer, people may turn over their decision from purchasing that specific product. They have also pointed out that individual's preferences are inversely proportional to the changes of delays.

For example, a company offers some rewards under a reward program and the customers are given the option to choose one out of two rewards which are 500 SEK after 1 month or 550 SEK after 3 months. According to the theory individuals normally select the first option than the second one because of length of delay.

2.4.3 Gender

Gender distribution has impact on discounting delayed rewards, because the preferences for a certain product could not be similar for both male and female. For instance, female can prefer one kind of product whereas male does not like that kind of products. When a firm offers a product reward scheme it must consider who are their target customers-male or female or both.

2.4.4 Age

Customers' or buyers' age is an important factor for justifying their purchase habits. In case of discounting delayed rewards it has also impacts on individuals' choices. People from different age groups discount the delayed rewards in different ways on the basis of their interests to the offered rewards. Green et al (1994) in their research found that children discount delayed rewards more steeply than the adults or older adults.

In another experimental research Whelan and McHugh (2009) observed that in the role of temporal discounting adolescents discount more than the older adults in offered delayed rewards. They examined this experiment on the respondents of three age groups; those are adolescents, adults and older adults.

2.4.5 Culture

Different culture or geographical background has also impacts on discounting delayed rewards. People from various cultures have various choices. For example, one product is preferred on one country or culture where as it is not preferred in another culture. For example, beer is acceptable in Christian culture while it is totally forbidden in Muslim culture.

In a cross cultural comparison of discounting delayed rewards Wanjiang et al (2002) noticed that people from different culture have different choices. In their study they have selected respondents from three cultures such as American, Chinese and Japanese graduate students. They found that due to differences of culture, peoples' preferences also changes. For instance, American and Chinese students discount delayed rewards more steeply than the Japanese students.

2.4.6 Certainty

Generally people prefer to receive the certain rewards over the uncertain rewards. According to Wanjiang et al (2002) in the case of probability discounting individuals are often found to choose certain rewards over the probabilistic rewards under a customer reward programs. For instance, a reward which has higher probability to prevail is more acceptable to the individuals compared to the one with lower probability of prevail. They have also stated that in the delayed rewards offer, monetary rewards are discounted less steeply over the non monetary rewards as individuals prefer the cash money than the directly consumable products.

Myerson et al (2003) have pointed the differences between the discounting of delayed rewards and probabilistic rewards. They have also mentioned that the amount of rewards have reverse effects on the temporal and the probability discounting. Small amount of delayed rewards are discounted more steeply than the larger amount of delayed rewards while larger probabilistic rewards are discounted more steeply than smaller probabilistic rewards because people prefer more certain rewards. Moreover they have asserted that individuals are observed to choose more certain rewards than the probabilistic rewards when there is a less amount of certain reward and a bigger amount of probabilistic reward.

2.4.7 Income level

Individuals are always careful about the costs or efforts they need to pay towards the rewards. The level of income is not similar to all the customers who purchase products. Due to differences of income individual preferences also changes. For example, a product is necessary for a person who has lots of money where as it is luxury for others who has limited budget. That's why before unfolding rewards program, a company needs to think about the level of income to target customers.

2.5 Luxury vs. Necessity Products

Generally products can be of two types such as necessity products and luxury products. Luxury products are such kind of products which are not too much essential and also have the demands when there is a higher income. On the other hand necessity products are those products which we need for our survival and its demand does not depend on the income level. For example, luxury products could be chocolate, wine, bottled water, jewelry, spa treatments, beauty care, etc. whereas necessity products are rice, oil, gas, salt, clothes, medicines, etc.

Kivetz and Simonson (2002) in their research stated luxuries and necessities can be comparable in terms of importance or hierarchy needs. They have also discussed that luxuries are the objects of desire that provides pleasures whereas necessities are the

objects that relieve an unpleasant state of discomfort. Moreover they defined luxury products as a non-essential products or services that lead to generous living while necessity products are those that cannot be lived without.

The differences between the luxury and the necessity products can be defined in terms of elasticity (Kemp, 1998). Luxury products have high income elasticity of demand whereas necessity products have low income elasticity of demand. Kemp (1998) also added stated that *'For a luxury good, the proportion of the household budget spent on that luxury good or a class of goods rises as the household income rise'(p593).* Essentials are those things that are needed for the preservation and seasonable enjoyment of life whereas luxuries are non essential items or services that contribute to deluxe living (Kivetz and Simonson, 2001). They also revealed that most of the customers prefer delayed luxury rewards for their pre-commitments toward the rewards.

According to Maslow's hierarchy of need, people always try to fulfill their basic needs before the other optional needs. For example, there is a choice between going to cruise for amusement (luxury need) and saving money for college tuition fee (necessity need). Individuals in general select the option to save money for the college tuition as it has more priority than rest (Kivetz and Simonson, 2001).

People need to take decision between necessity or luxury items. According to economic theory, humans have limited resources but infinite needs. That is why, people must need to utilize that limited resources in a proper way and prioritize their demands on the basis of basic needs. For example mobile phone or telephone is a necessity product these days but iPhone is a luxury product. Previous studies established the fact that individuals' discount future rewards. As necessity and luxury products are important and plays a vital role in individuals' way of living, it is needed to study how people discount luxury products over necessity products in delayed rewards.

Chapter Three: Research Methods

3.1 Study Design

Study design or research design describes the entire research plan and requires phases to carry out the research. Research designs are classified into the following three different types:

i) *Exploratory Research Design*: The purpose of this design is to obtain necessary knowledge about the research problem. This research methodology is followed when the research problem is not structured and characterized.

ii) *Descriptive Research Design*: In this method research problem is stated in a more organized well known manner prior to start of the research.

iii) *Casual Design Method*: In order to find the cause and effects relationships between two or more variables, this research approach is used.

We have followed the exploratory research design method to carry out this research method. Previous research shows that discounting has a vital importance in order to select either luxury products or necessary products under an offered reward program.

3.2 Product Selection for Reward

In reality there are several luxury products and necessity products whose values varies within relevant categories. There are several basic products such as rice, oil, electricity, telephones, TV, washing machine, etc varies in their values. The values of some products are higher than that of other products. There are differences in values of luxury products such as jewelry products, spa treatments, wine etc. Hence, we are going to describe the following factors which play an important role in choosing the different luxury items and necessity items.

Criteria 1: *Similarities between luxury and necessity reward.*

Based on the value luxury and necessary reward should comparable, since the individual's selection of reward may be varied because of the monetary value of the reward. For instance, washing powder is a necessity product while camera is a luxury reward, and they are not similar due to their monetary value.

Criteria 2: *There should be difference in selling frequency of necessity and luxury products*

There should be significant difference of the purchasing frequency between the luxury and necessity products. This means that necessity products selected for the reward should be sold more frequently than the selected luxury reward.

Criteria 3: *Difference between spending money on product per year between necessity and luxury products*

There should be significant variance in spending money between necessity and luxury products per year or in a certain period. Individuals need to spend money on necessity products more than luxury products, since luxury product is not necessary for them.

In this thesis, participants were expected to select between a 1000 SEK rebates coupons at their favorite grocery store as a necessity reward and a 1000 SEK spa treatments as a luxury reward. Since people require purchasing their necessity products very frequently from a grocery store, rebate coupons at favorite grocery store was selected as the necessity reward. In contrast spa treatments were selected as a luxury reward since individuals have awareness about physical beauty. Spa treatment includes the body massage, facials, nail treatments, haircut, physical exercise support etc.

3.3 Time Selection for Reward

Five different delays were given to the participants during the survey in order to prefer the rewards of equal value. Those delays were *TODAY, ONE MONTH, TWO MONTHS, THREE MONTHS, SIX MONTHS,* and *ONE YEAR*. Since the goal of the thesis was to

identify the individual's behavior on delayed rewards, we have given importance on the delay length for measuring individual's discounting. There is little difference between *TODAY* and *ONE MONTH*. But *THREE MONTHS* is a considerable length of delay. On the other hand *SIX MONTHS* and *ONE YEAR* is much longer delays. Hence first three delays were considered as near future while later two delays were considered as far future. However, length of delays must have an impact on individual's selection for discounting one over another.

3.4 Sampling Procedure

Basically the sampling procedure is more concerned with the population. There are two types of sampling procedure which are used to do proper sampling. They are the probability sampling and non probability sampling. In probability sampling, the sample unit has a chance to know for being selected. There are many types of probability sampling such as simple random sampling, systematic sampling, statistical sampling, and cluster sampling. In non probability sampling refers to the sampling procedure where the probability of selection cannot be determined accurately. Non probability sampling allows the convenience sampling, judgment sampling, quota sampling and snowball sampling (Ivy, 2009). In this research simple random sampling procedure will be followed to select the sample size from the target sample population.

3.5 Sample Size

The target population of this research could be anyone since most of the people are exposed to delayed rewards. In the research, the selected populations were the students living in the Kista student apartments in Stockholm. We know from previous studies that discounting of delayed rewards vary due to some control variables such as gender, age, demographic background, income level, and many other issues. Therefore, in the survey of this study those characteristics of discounting have been taken into consideration in order to avoid biasness.

We have applied simple random sampling for the survey procedure. All the students living in Kista student apartments were allowed to participate as there were no specific control variables towards the respondents such as certain age group or income level can participate rest cannot do that. In those apartments more than thousands students are living, but it is not possible to collect each and every one's response for this thesis due to some limitations. Therefore, we have randomly selected only 100 respondents for the survey procedure to make the research flexible and fruitful.

3.6 Data Source

From research point of view, data sources are classified into two forms: primary source and secondary source. Primary data source is the basis of any research that supply raw gathered by the participants of the research. Primary data can be collected in different ways; among them experiment, observations, surveys, interviews etc are most common ways (Ivy, 2009). On the other hand, secondary data sources refer to the literature reviews and previous research carried out in the related field. Main source of this data sources are articles, journals, internet websites, books, previous research papers or thesis etc. In this study the data sources were both the primary and secondary. Primary data have been collected from the survey and the secondary data were collected from the journals, articles, books and also from the internet.

3.7 Data Collection

One of the most important phases of each research is the data collection. Ghauri and Gronhaug (2005) stated the choice of data collection method relies on the analysis of different kinds of data in order to perform specific research. Two distinguishing ways of data collection are used to carry out the research: qualitative approach and quantitative approach. Former approach is used to evaluate a particular research problem on the basis of testing a theory. This approach verifies the hypothesis stated in the research and results true. In contrast, the later approach is more subjective than the qualitative approach: and the goal of this approach is clarifying the human behavior regarding the corresponding

research problem (Ivy, 2009). However, we have used quantitative method in the research project in order to gather necessary data.

In the survey, we have given a set questionnaire to the participants. For the reward program five different durations were set as delays such as TODAY, ONE MONTH later, THREE MONTHS later, SIX MONTHS later, and ONE YEAR later. These delays were set in order to identify people's stance for upcoming rewards of both shorter length of delay as well as longer length of delays. The value of the reward was constant and was set 1000 SEK. The value change effect of delayed rewards is out of the scope of this thesis.

To find out the effect of time in individual's preference, we have used four control variables in this research. These control variables are gender, country, culture, and age which are used to analyze data and their effects on the delays of a reward program. The paper based questionnaires (included in Appendix A) were given to the participants to give their preference in different context of different delay length of a reward program.

3.8 Data Analysis

The analysis of data is very important to get the exact view of collected data. In this study collected data have been analyzed in the form of likert scales. Data on control variables have been presented in pie chart and others have been described in different graphs. We have compared the results on the basis of individual's response on the likert scales. There were five options in each statement such as strongly agree, agree, neutral, disagree and strongly disagree. Also it has been considered by using formula to find out percentage preference on the necessity rewards and luxury rewards.

Chapter Four: Results and Analysis

4.1 Survey Results

After completing the survey we have found the data on individuals' response towards necessity rewards and luxury rewards. The demographic background of the respondents and other general information are described below.

4.1.1 Gender

Out of 100 respondents of this survey, the number of male respondents was 68 and rest 32 respondents were female. In those student apartments male students were living more than the female students. One pie chart is given below to understand the accurate view of gender distribution.
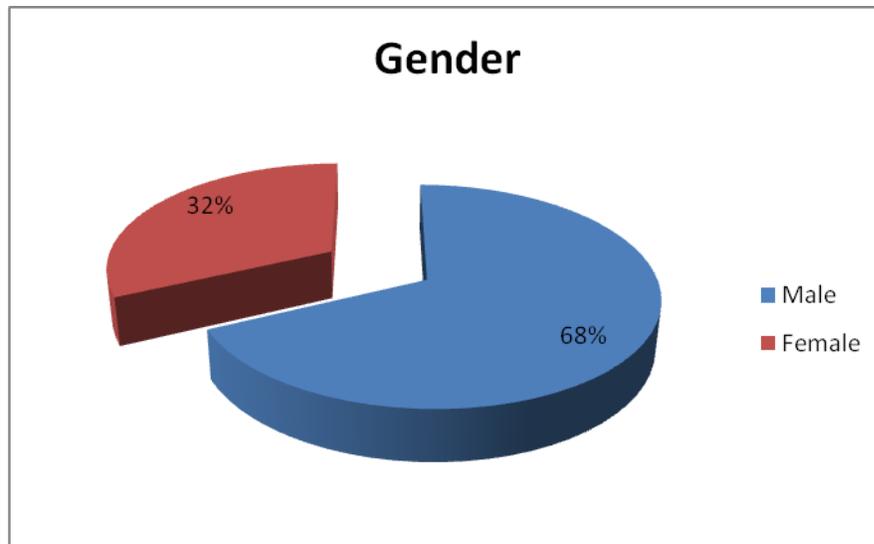
Figure 3: Gender division of the respondents

4.1.2 Age Group

For this survey we have chosen the respondents from the different age group to find out exact response regarding the delayed necessity and luxury product rewards. For this reason the age range were divided in five categories. Those were below 20, between 20-25, between 25-30, between 30-35, and above 35. One pie chart is given below on the basis of age group differences.
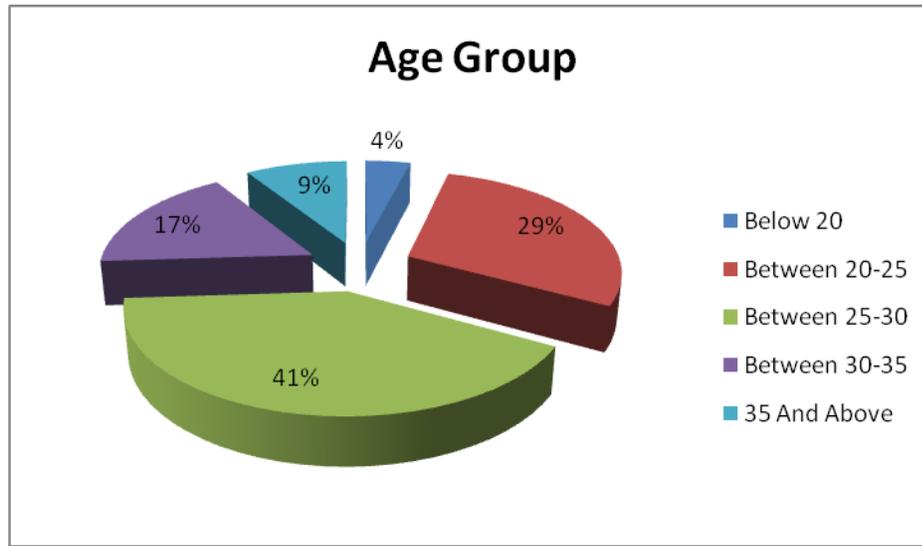
Figure 4: Age group distributions of the respondents

4.1.3 Income level

Due to variance of income individuals preferences to purchase product also varies. The people who have high income, they are not too much concerned about the necessity product. But this is opposite to the people of lower income. In this survey respondents were divided in to five income level ranges on the basis of per month income. Those income ranges are presented below in a pie chart.

Figure 5: Income level distributions of the respondents

4.1.4 Nationality

Individual's choices also vary due to differences in culture and nationality. People from the developed county have one kind of preferences for purchasing products where as it is not similar to the underdeveloped or developed countries. In this survey we have gathered data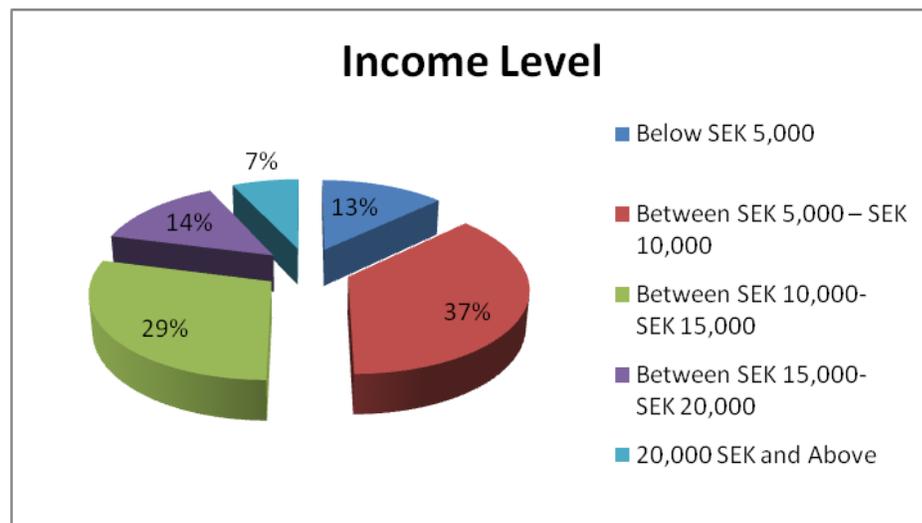 from the respondents of multi culture and nations. For example, the respondents were from, Sweden, Germany, Spain, Estonia, Latvia, Finland, Nigeria, Pakistan, Bangladesh, India, China, Iran, Indonesia, Ethiopia and others.

4.2 Evaluation Process

Respondents were given the option to give their opinion on the statements when rewards are offered in different time variables, such as *TODAY, ONE MONTH LATER, THREE MONTHS LATER, SIX MONTHS LATER*, and *ONE YEAR LATER*. The first statement represents the necessity reward and the second one represents the luxury rewards. There were five options (i.e. Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree). Here we assumed that those who are strongly agree or agree on a statement 1, he/she would be strongly disagree or disagree on statement 2. We have evaluated our survey result using the following formulas:

$$R_{npr} = \frac{SA_{s1} + A_{s1} + SD_{s2} + D_{s2}}{2} - - - - - - - - - - - - - - (i)$$

$$R_{lpr} = \frac{SD_{s1} + D_{s1} + SA_{s2} + A_{s2}}{2} - - - - - - - - - - - - - - (ii)$$

$$R_{u} = \frac{N_{s1} + N_{s2}}{2} - - - - - - - - - - - - - - - - - - (iii)$$

Where,
  R = Total Number of respondents
  R_{npr} = Number of respondents prefers necessity products rewards
  R_{lpr} = Number of respondents prefers luxury products rewards
  R_{u} = Undecided/Neutral
  SA_{s1} = Strongly Agree on Statement 1
  A_{s1} = Agree on Statement 1

SA$_{s2}$= Strongly Agree on Statement 2

A$_{s2}$= Agree on Statement 2

SD$_{s1}$= Strongly Disagree on Statement 1

D$_{s1}$= Disagree on Statement 1

SD$_{s2}$= Strongly Disagree on Statement 2

D$_{s2}$= Disagree on Statement 2

U$_{s1}$=Undecided or neutral on statement1

U$_{s2}$=Undecided or neutral on statement2

It is notable that we have considered those who are *strongly agree and agree on statement1* and *strongly disagree and disagree on statement2* prefer the necessity product reward. On the other hand, those who are *strongly agreed and agree on statement2* and *strongly disagree and disagree on statement1* prefer luxury product reward. Number of neutral persons is calculated using average of undecided person on both statements.

Further we have used R_{npr}, R_{lpr} and R_u to get the percentage of the respondent's choice for selecting necessity reward or luxury reward with respect to the time. Using the following equations we have calculated the results.

$$\% \ of \ preference \ on \ necessity \ product \ rewards \ = \frac{Rnpr \ X \ 100}{R} \ldots\ldots\ldots\ldots. \ (iv)$$

$$\% \ of \ preference \ on \ luxury \ product \ rewards \ = \frac{Rlpr \ X \ 100}{R} \ldots\ldots\ldots\ldots. \ (v)$$

$$\% \ of \ undecided \ respondents \ = \frac{Ru \ X \ 100}{R} \ldots\ldots\ldots\ldots. \ (vi)$$

4.2.1 Case 1

In this case, respondents were given the offer today to select a necessity reward of 1000 SEK amount rebate coupons at favorite grocery store. In section 3.5, we have stated that the total number of respondents in the survey were 100 students. Among them 52 respondents were strongly agree, 28 respondents were agree, 6 respondents were strongly disagree, and 12 respondents were disagree on the statement 1. We found 2 respondents

were undecided on statement1. Figure 6 represents the survey results graphically when the offer was for TODAY.
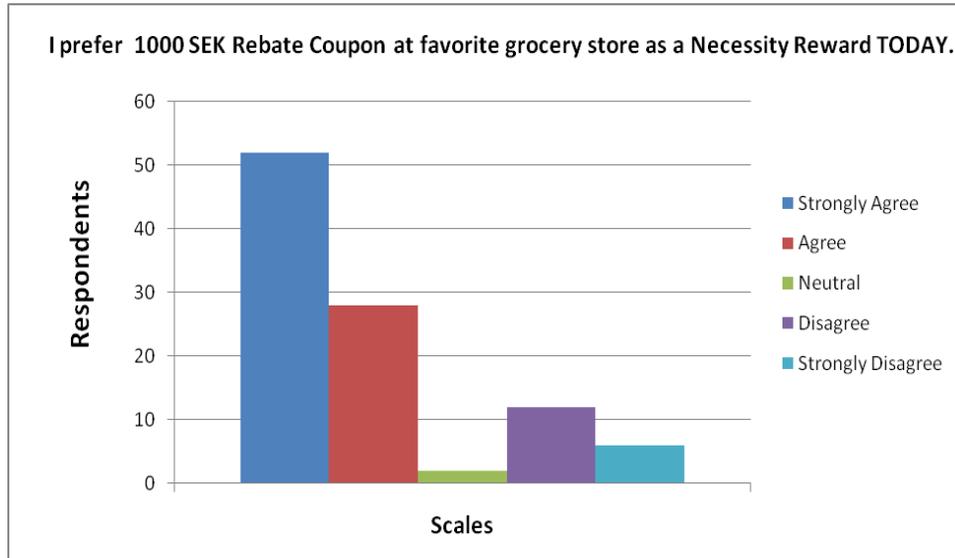
Figure 6: **Individuals response on statement 1 of case 1**

Case one of statement 2 represents the offer of 1000 SEK spa treatments as a luxury reward TODAY. Here we have found that 6 respondents were strongly agree, 13 respondents were agree, 34 respondents were strongly disagree, and 43 respondents were disagree on this statement. For statement 2, 4 respondents were undecided. Figure 7 represents the survey results graphically of statement2 for the offered reward TODAY.
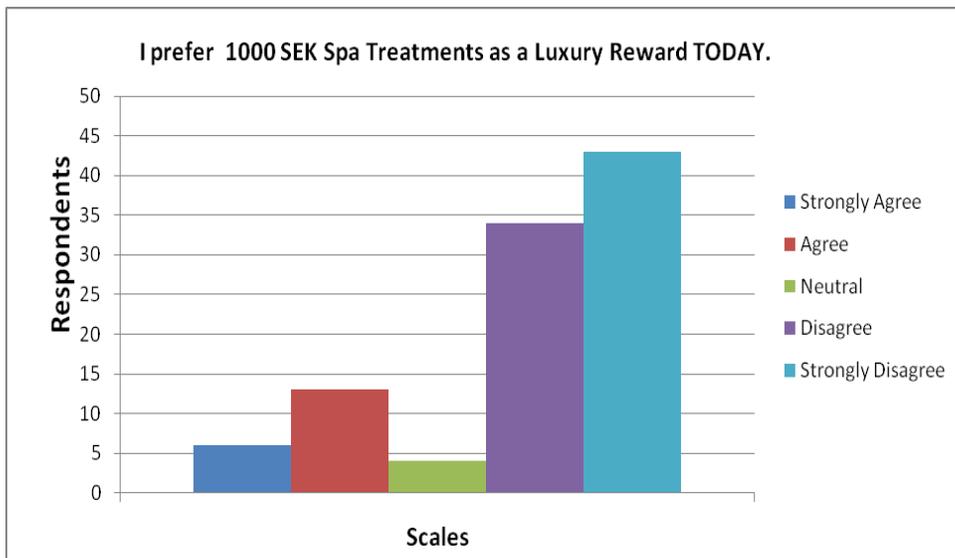

Figure 7: **Individuals response on statement 2 of case 1**

26

Substituting survey results in equations (i), (ii), and (iii), we have found the following values

$$R_{npr} = \frac{52 + 28 + 34 + 43}{2} \cong 78$$

$$R_{lpr} = \frac{6 + 12 + 6 + 13}{2} \cong 19$$

$$R_u = \frac{2+4}{2} \cong 3$$

That means 78 respondents preferred the necessity rewards while 19 respondents preferred the luxury rewards and 3 respondents were undecided. Percentage of the respondent's response on case one is presented below by using equations (iv), (v) and (vi).

$$\% \, of \, preference \, on \, necessity \, product \, rewards \, = \frac{78 \, X \, 100}{100} = 78\%$$

$$\% \, of \, preference \, on \, luxury \, product \, rewards \, = \frac{19 \, X \, 100}{100} = 19\%$$

$$\% \, of \, undecided \, respondents \, = \frac{3 \, X \, 100}{100} = 3\%$$

From the above calculation it is found that 78% respondents liked the necessity rewards where as only 19% liked the luxury rewards when those rewards will be offered today. On the other hand 3% respondents were neutral or undecided.

4.2.2 Case 2

In this case respondents were given the same options and reward value but only difference was time. Here the rewards will be offered after one month. In this case most of the respondents prefer the necessity rewards over the luxury rewards. Total 43 respondents were strongly agreed on statement1 of this case and 9 respondents were strongly disagreed. Participants' response on statement 1 of case 2 is presented below in figure 8.

Figure 8: **Individuals response on statement 1 of Case 2.**

In the statement 2 case respondents were offered the rewards after one month. Luxury rewards like spa treatments were offered after one month as product rewards in this situation. Here 42 respondents were strongly disagreed and 8 respondents were strongly agreed. The individual's response on statement 2 of case 2 is presented below in figure 9 to see the whole scenario.

Figure 9: **Individuals response on statement 2 of Case 2.**

Substituting survey results in equation (i), (ii), and (iii), we have found the following values

$$R_{npr} = \frac{44 + 27 + 29 + 42}{2} \cong 71$$

$$R_{lpr} = \frac{9 + 15 + 8 + 17}{2} \cong 25$$

$$R_u = \frac{5+4}{2} \cong 4$$

That means 71 respondents favored the necessity rewards while 25 respondents favored the luxury rewards and 4 respondents were undecided. Percentage of the respondent's response on case 2 is presented below by using equation (iv), (v) and (vi).

$$\% \, of \, preference \, on \, necessity \, product \, rewards \, = \frac{71 \, X \, 100}{100} = 71\%$$

$$\% \, of \, preference \, on \, luxury \, product \, rewards \, = \frac{25 \, X \, 100}{100} = 25\%$$

$$\% \, of \, undecided \, respondents \, = \frac{4 \, X \, 100}{100} = 4\%$$

From the above calculation it is found that 71% respondents had a preference over the necessity rewards at the same time 25% respondents had a preference over the luxury rewards when those rewards will be offered after one month. Also 4% respondents were undecided.

4.2.3 Case 3

In the third case respondents were given the option to give their opinion on statement 1 as necessity reward (i.e. rebate coupon at favorite grocery store) will be offered three months later. As three months is a little longer delay, respondent's preferences for the luxury rewards were increased. In the statement1 around 35 respondents were strongly agreed on the other hand 18 respondents were strongly disagreed and 27, 6, 14 respondents were agreeing, neutral and disagreeing respectively. One graph is presented below regarding statement 1.
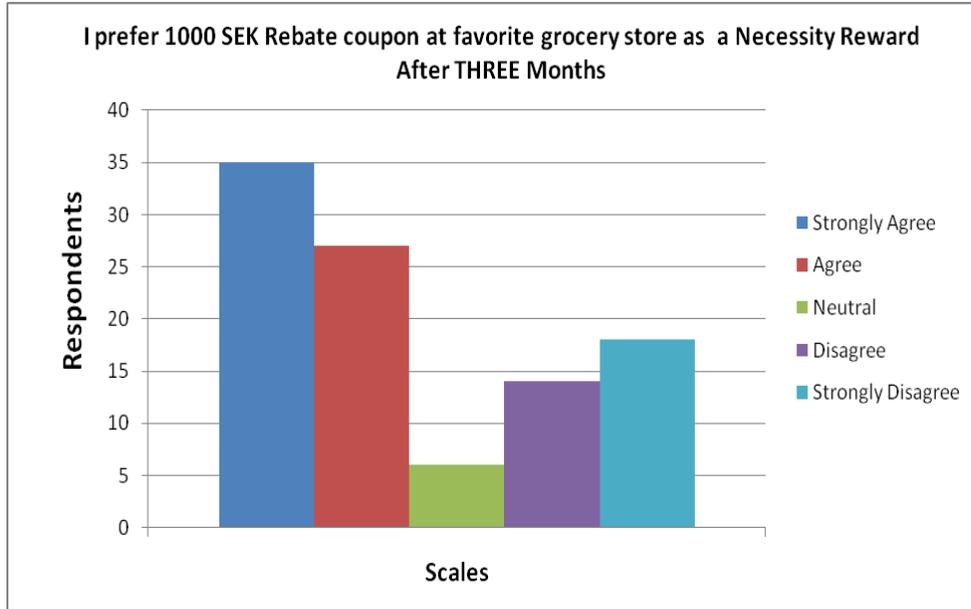
Figure 10: **Individuals response on statement 1 of Case 3.**

In statement 2, respondents were offered luxury rewards after three months. In this situation there were no big differences of preferences between positive and negative responses. Here out of 100 respondents 29 respondents strongly agreed while 25 respondents strongly disagreed. Figure 11 is presented below to show the actual scenario.

Figure 11: **Individuals response on statement 2 of Case 3.**

Substituting the survey results in equation (i), (ii), and (iii), we have found the following values

$$R_{npr} = \frac{35 + 27 + 25 + 18}{2} \cong 53$$

$$R_{lpr} = \frac{18 + 14 + 29 + 23}{2} \cong 42$$

$$R_u = \frac{6+5}{2} \cong 5$$

From the above findings it is shown that 53 respondents chosen the necessity rewards while 42 respondents chosen the luxury rewards and 5 respondents were undecided. Percentage of the respondent's response on case 3 is presented below by using equation (iv), (v) and (vi).

$$\% \text{ of preference on necessity product rewards} = \frac{53 \times 100}{100} = 53\%$$

$$\% \text{ of preference on luxury product rewards} = \frac{42 \times 100}{100} = 42\%$$

$$\% \text{ of undecided respondents} = \frac{5 \times 100}{100} = 5\%$$

From the above calculations it is found that 53% respondents had a preference over the necessity rewards simultaneously 42% respondents had a preference over the luxury rewards when those rewards will be offered after three month and 5% respondents were neutral or undecided.

4.2.4 Case 4

In case 4, respondents were offered the necessity rewards and luxury rewards after six month. In statement 1, respondents' preference on necessity rewards were much lower than the previous cases. Here 19 respondents strongly agreed while 35 respondents strongly disagreed. That means in this situation individual likes the luxury rewards more than the necessity rewards for their recreational purposes. To present this situation one graph is given below.
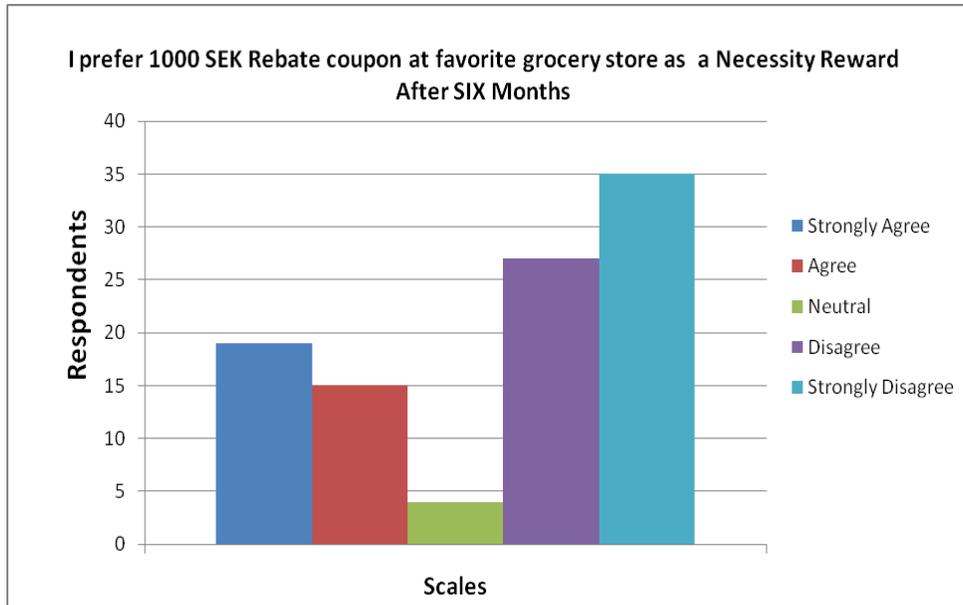
Figure 12: **Individuals response on statement 1 of Case 4.**

In statement 2 of case 4, it represents that luxury rewards will be offered after six month as a product reward. Here people like luxury rewards more than the necessity rewards. Majority of the respondents strongly agreed on this statement whose no was 35. And only 18 respondents strongly disagreed. Figure 13 is given below for describing this situation.

Figure 13: **Individuals response on statement 2 of Case 4.**

Substituting the survey results in equation (i), (ii), and (iii), we have found the following values

$$R_{npr} = \frac{19 + 15 + 18 + 15}{2} \cong 34$$

$$R_{lpr} = \frac{35 + 27 + 35 + 28}{2} \cong 62$$

$$R_u = \frac{4+4}{2} \cong 4$$

From the above findings it is shown that 34 respondents preferred the necessity rewards whereas 62 respondents preferred the luxury rewards and 4 respondents were undecided. Percentage of the respondent's response on case 4 is presented below by using equation (iv), (v) and (vi).

$$\% \ of \ preference \ on \ necessity \ product \ rewards = \frac{34 \ X \ 100}{100} = 34\%$$

$$\% \ of \ preference \ on \ luxury \ product \ rewards = \frac{62 \ X \ 100}{100} = 62\%$$

$$\% \ of \ undecided \ respondents = \frac{4 \ X \ 100}{100} = 4\%$$

From the above calculations it is found that 34% respondents had a preference over the necessity rewards simultaneously 62% respondents had a preference over the luxury rewards when those rewards will be offered after three month and 4% respondents were neutral or undecided.

4.2.5 Case 5

In the last case, where rewards will be offered after one year of equal value both the necessity and luxury products. In statement 1 which represents the preference of necessity reward. In this statement most of the respondents were strongly disagree on getting the necessity reward and very few were strongly agree or agree. From the total respondents 15 respondents strongly agreed on it and 39 respondents strongly disagreed on this statement. Individual's response on statement1 of case 5 is presented below in figure 14.

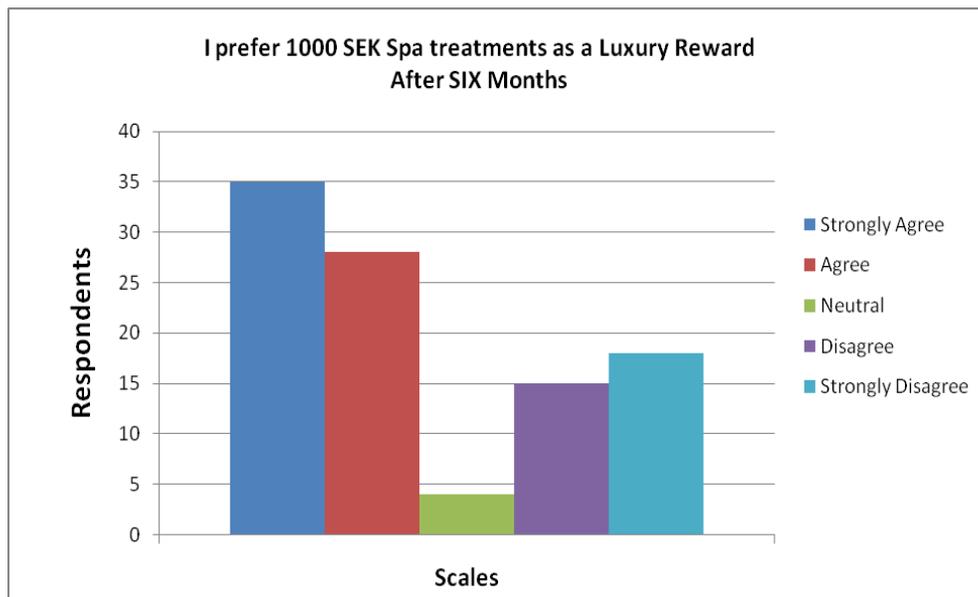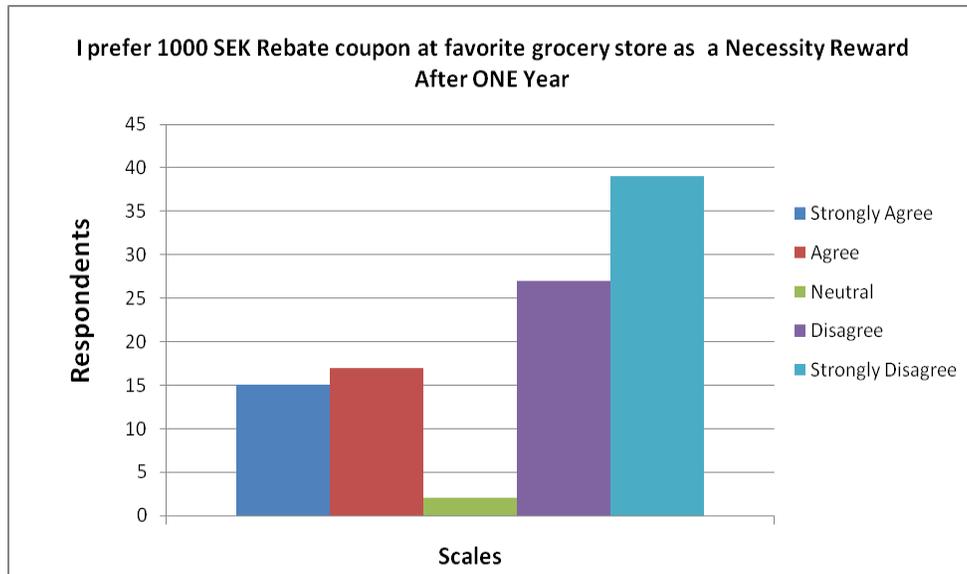**Figure 14**: **Individuals response on statement 1 of Case 5.**

In statement 2 of this case represents the luxury rewards where majority of the people preferred the luxury rewards as it offered after 1 year. Around 37 respondents strongly agreed on the statement 1 and only 16 respondents strongly disagreed on it. That means they prefer the luxury reward in longer period of time. One graph is presented below to show the respondents response on statement 2 of case 5.

Figure 15: **Individuals response on statement 2 of Case 5.**

Substituting the survey results in equation (i), (ii), and (iii), we have found the following values

$$R_{npr} = \frac{15 + 17 + 16 + 11}{2} \cong 29$$

$$R_{lpr} = \frac{39 + 27 + 37 + 33}{2} \cong 68$$

$$R_u = \frac{2+5}{2} \cong 3$$

From the above findings it is shown that 29 respondents preferred the necessity rewards whereas 68 respondents preferred the luxury rewards and 3 respondents were undecided. Percentage of the respondent's response on case 5 is presented below by using equation (iv), (v) and (vi).

$$\% \ of \ preference \ on \ necessity \ product \ rewards = \frac{29 \ X \ 100}{100} = 29\%$$

$$\% \ of \ preference \ on \ luxury \ product \ rewards = \frac{68 \ X \ 100}{100} = 68\%$$

$$\% \ of \ undecided \ respondents = \frac{3 \ X \ 100}{100} = 3\%$$

From the above results, it is found that 29% respondents had a preference over the necessity rewards concurrently 68% respondents had a preference over the luxury rewards when those rewards will be offered after three month and 3% respondents were neutral or undecided.

4.3 Discussion

We have conducted our survey over the 100 respondents to find out their attitude towards the necessity rewards and luxury rewards in various lengths of delays. They have given the five time differences to give their opinion on the statement. In the survey, we could have used the reward value more than 1000 SEK such as 5000 SEK, 10000 SEK or 15000 SEK and larger delays such as after 3 years, 5 years or 10 years. But to keep the balance between the reward value and future length of delay, we have fixed 1000 SEK as reward value and maximum length of delay was 1 year.

In this research, the survey participants were chosen among the students as it was not able to reach other group of people due to shortage of time and some other problems. If the respondents were the worker or people from different professional group then the results might not be similar. As we know from the previous studies that individuals preference changes due to having different levels of income. Students usually do not involve in much earning that is why they may prioritize their necessity demands in shorter delays. On the other hand, people who are working more and have higher income may think about the luxury demands more than the students.

Moreover in the study, grocery store rebate coupon was selected as necessity rewards and spa treatment was selected as luxury rewards. We could have selected the other necessity items like gas, medicines clothes, etc as necessity rewards also the other luxury items like designers' clothes, wines, jewelry, pleasure trip, etc as luxury rewards. But to give the major focus on necessity products grocery store rebate coupon was selected as individuals are more familiar in this kind of store and has the importance compared to other necessity items. Additionally spa treatment is also more frequent to the individuals than the other luxury items.

Each and every business firm has an aim to maximize their profit as well as to satisfy their customers so that they will be loyal to the company. Giving rewards to the customer is an effective and smart technique to increase customer loyalty. For rewards unfolding company has various options to present. But to make the reward program successful for the business firm as well as to satisfy customers, firms need to be more concerned about the delayed products rewards.

On the basis of income and budget size customers have different purchase preferences. Individuals of limited budget have the high priority for the necessity products while it might not be similar for the individuals who have unlimited income and budget size. That is why a company or business firm must need to give more concentration over the issue of delayed reward discounting. Also it is important to know how individuals discount the

luxury rewards over the necessity rewards when those rewards will be offered after a certain period of time.

According to our first hypothesis, individuals discount luxury rewards more steeply over the necessity rewards in shorter length of delay of equal reward value. Additionally our second hypothesis states that individuals discount luxury rewards less steeply over the necessity rewards in longer length of delay of equal reward value. Due to limitations of monthly budget people always try to fulfill their basic needs first. When their basic needs are fulfilled then they may think about the luxury products. In the study, survey was conducted over the respondents to assure that the hypotheses which were assumed are correct.

In the research four control variables have used for data collection which are gender, age, income level and nationality. We found the similarity here of previous research conducted on discounting delayed reward. In the survey female respondents preferred spa treatments more compared to the grocery store rebate coupons as female are more concerned about their beauty than the man. We have also found that respondents from lower income level prefer necessity rewards more than the luxury rewards. Furthermore participants from underdeveloped and developing country prefer the necessity rewards more than the luxury rewards in different situations.

After analyzing the survey data from each case it was found that majority of the respondents prefer the necessity rewards in shorter period of time or delays on the other hand they prefer the luxury rewards when rewards were offered in further delays or larger delays. We have found the percentage of preference over the necessity rewards and luxury rewards as well as the percentage of neutral or undecided respondents. From the calculation it was found that 78% respondents preferred the necessity rewards and 19% preferred the luxury rewards when it was offered today.

On the other hand 68% respondents preferred the luxury rewards and 29% respondents preferred the necessity rewards when those will be offered after one year. So it is clear

that when differences of time increases then the preference for necessity rewards is decreases. One graph is presented below where the percentage change of respondents' preferences between luxury and necessity rewards on various time variances.

Figure 16: **Luxury vs. necessity rewards on difference of time**

In the above figure, green line represents the necessity rewards and red line represents the luxury rewards. If we compare the two lines together, we see the real scenarios' regarding individuals' preferences on differences of time. In the first case when rewards are offered today most of the respondent preferred the necessity rewards while very few opted for luxury rewards. On the contrary, in the last case although not exact but it is almost similar opposite to first case. So finally it can be said that due to differences of time individuals preferences changes to select the delayed product rewards.

Chapter Five: Conclusion

5.1 Summary

Currently individuals are very much concerned about their purchase behavior. They always try to make ideal decision on every purchase. In the competitive business world companies are also offering different kinds of rewards programs to keep their customers loyal to their products and services. In such situation discounting plays a very important role in making decision. In the case of customer rewards program when reward will be given after a certain period of time, then customers need to discount some immediate reward to get the better delayed reward. Naturally people always try to get more benefits and want to spend less money for that purpose.

Discounting of delayed reward is very common for the people these days. In this research we have focused on discounting product rewards under a customer reward program. After completing the empirical study it is found that people prefer the necessity rewards in shorter period of time but in the longer period of time they prefer luxury rewards. An individual first tries to meet his basic needs then if he has extra money, he thinks about the luxury. When people have high income and all necessary needs are fulfilled then they try to spend some money for their internal pleasure or entertainment.

From the survey results it was found that the assumed hypotheses were correct. While collecting data from the respondents, different age group, gender and income level by means of measurement parameters were considered with avoidance of biasness of the data. After analyzing the survey data it was found that greater part of the respondents preferred necessity product for the shorter period of time such as today, after 1 month and 3 months where as in the longer delay (6 months and 1 year) respondents preferred the luxury rewards. Therefore, it is clear that for declaring of offering delayed rewards, individuals discount luxury rewards more steeply over the necessity rewards in the shorter period of time while in the longer period of time they discount less steeply of equal amount reward value.

A business firm can offer different purchase incentives to the customer for the purpose of increasing customers' loyalty towards their product. They can put forward both the immediate or delayed rewards under the customer rewards program. But when they offer necessity products versus luxury products as delayed rewards, customers tend to be concerned about the time duration of availing the reward. Our analysis shows that for the shorter period of time or delay customers prefer the necessity rewards but for the longer length of delay they may prefer the luxury rewards such as amusement tour, spa treatments, etc.

5.2 Further Research

After conducting our survey and analyzing those collected data we want to mention that more research works are needed on discounting delayed necessity and luxury rewards. Due to the limitation of time it was not possible to give concentration on all issues of product reward discounting. In this research, we did not change the reward value of both the cases of necessity and luxury products. That's why further researches will be useful in the cases where the reward value is not similar. Moreover, it is also needed to know how individuals discount value of the products rewards in terms of efforts such as high valued product vs. low valued products.

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Appendix

Appendix A: Questionnaire

The present survey has been conducted as a part of my Master's Thesis entitled **"Product Reward Discounting on Variance of Time"** under the program of *Master of Science in Business Administration*. Thanking you in advance for your kind cooperation and time.

Section 1: Background Questions

1. What is your name?

   Ans:……………………………….

2. Gender :

   ☐ Male   ☐ Female

3. Age Group:

   ☐ Below 20

   ☐ Between 20-25

   ☐ Between 25-30

   ☐ Between 30-35

   ☐ 35 And Above

4. Income level per Month:

   ☐ Below SEK 5,000

   ☐ Between SEK 5,000 – SEK 10,000

   ☐ Between SEK 10,000- SEK 15,000

   ☐ Between SEK 15,000- SEK 20,000

   ☐ 20,000 SEK and Above

5. Where are you from or your Nationality?

   Ans:……………………………….

Section 2: Luxury vs. Necessity Rewards on variance of time

Case 1: When rewards are offered **TODAY**

Statements	1 Strongly Agree	2 Agree	3 Neutral	4 Disagree	5 Strongly Disagree
I prefer 1000 SEK Rebate coupon at favorite grocery store as a Necessity Reward.					
I prefer 1000 SEK Spa treatments as a Luxury Reward.					

Case 2: When rewards will be offered after **ONE MONTH**

Statements	1 Strongly Agree	2 Agree	3 Neutral	4 Disagree	5 Strongly Disagree
I prefer 1000 SEK Rebate coupon at favorite grocery store as a Necessity Reward.					
I prefer 1000 SEK treatments as a Luxury Reward.					

Case 3: When rewards will be offered after **THREE MONTHS**

Statements	1 Strongly Agree	2 Agree	3 Neutral	4 Disagree	5 Strongly Disagree
I prefer 1000 SEK Rebate coupon at favorite grocery store as a Necessity Reward.					
I prefer 1000 SEK Spa treatments as a Luxury Reward.					

Case 4: When rewards will be offered after **SIX MONTHS**

Statements	1 Strongly Agree	2 Agree	3 Neutral	4 Disagree	5 Strongly Disagree
I prefer 1000 SEK Rebate coupon at favorite grocery store as a Necessity Reward.					
I prefer 1000 SEK Spa treatments as a Luxury Reward.					

Case 5: When rewards will be offered after **ONE YEAR**

Statements	1 Strongly Agree	2 Agree	3 Neutral	4 Disagree	5 Strongly Disagree
I prefer 1000 SEK Rebate coupon at favorite grocery store as a Necessity Reward.					
I prefer 1000 SEK Spa treatments as a Luxury Reward.					

Appendix B: Prior Research on Discounting

No	Source	Main Focus	Methods	Results
1	Estle, Green, Myerson and Holt (2007)	Rewards value or outcome	Experiment	Reward value could be monetary (cash money) or nonmonetary (directly consumable products).
2	Green, Fry and Myerson (1994)	Age related changes	Experiment	Discounting varies over the different age group.
3	Wanjiang, Green and Myerson (2002)	Cross-cultural	Experiment	Demographic or cultural background influences the choice of delayed reward.
4	Myerson, Green, Scott Holt and Estle (2003)	Probabilistic	Experiment	Certainty of rewards motivates people towards delayed reward.
5	Yi, Johnson, Giordano, Landes, Badger and Bickel (2008)	Cigarette Smokers	Experiment	Smokers discount delayed rewards more steeply than the non smokers.
6	Kawashima and Kentaro (2006)	Inflation and Interest Rates	Experiment	Inflation and interest rates influence the people to choose the delayed reward.
7	Kirby, and Santiesteban, (2003)	Utility, Transaction Costs and Risks	Experiment	Various costs and risks affects on decision making regarding delayed rewards.
8	Nancy M. Petry and Thomas Casarella, (1999)	Gamblers	Experiment	Gamblers discount more steeply than the ordinary people of delayed rewards.
9	Odum & Rainuad (2003)	Consumables	Experiment	Rewards should be consumable and accepted by ordinary people.
10	Murphy, Vuchinich & Simpson (2001)	Gains and Losses	Experiment	Delayed rewards must have the possibility to gains.