Importance of Shelf Space
Is shelf space equally important for the different product categories in grocery store (ICA Alidhem)?

Authors: Avais, Ammar
          Yaqoob, Gulraiz

Supervisor: Sofia Isberg

Student
Umeå School of Business
Spring semester 2010
Master thesis, one-year, 15 hp
ABSTRACT ............................................................................................................................. 5

Introduction ........................................................................................................................................... 6
  1.1 What is Shelf space? ...................................................................................................................... 6
  1.2 BACKGROUND .............................................................................................................................. 7
    1.2.1 Importance of Shelf space for manufacturers: ................................................................. 7
  1.3 Product Categories ...................................................................................................................... 8
  1.4 Research Question .................................................................................................................... 8
  1.5 Purpose .......................................................................................................................................... 9

  1.6 Limitation ..................................................................................................................................... 9
    1.6.1 Consumers ............................................................................................................................... 9
    1.6.2 Choice of Products .................................................................................................................. 9
    1.6.3 Choice of Store ....................................................................................................................... 9
  1.7 Term Definitions ........................................................................................................................... 9
    1.7.1 Grocery Store ........................................................................................................................... 9
    1.7.2 Product Categories ................................................................................................................ 9
    1.7.3 Manufacturer .......................................................................................................................... 10
    1.7.4 Retailers .................................................................................................................................. 10
    1.7.5 Consumers ............................................................................................................................... 10
    1.7.6 Planogram ................................................................................................................................ 10

Methodology .......................................................................................................................................... 11
  2.1 Methodological Assumption ........................................................................................................ 11
  2.2 Preconceptions ............................................................................................................................. 11
  2.3 Research Strategy ....................................................................................................................... 12
    2.3.1 Choice of Industry .................................................................................................................... 12
    2.3.2 Why we select one store ......................................................................................................... 12
    2.3.3 Location and Competitive environment .............................................................................. 13
    2.3.4 Specific Store Characteristics .............................................................................................. 13
    2.3.5 Description of ICA Alidhem Store ..................................................................................... 13
    2.3.6 Choice of Product .................................................................................................................. 13
  2.4 Research Design .......................................................................................................................... 14
  2.5 Research Approach .................................................................................................................... 14
    2.5.1 Instrument to collect the data ............................................................................................... 15
  2.6 Structure of the questionnaire .................................................................................................... 15
    2.6.1 Price of this product is .......................................................................................................... 16
    2.6.2 Suggestions of other people are ............................................................................................ 16
    2.6.3 I buy the most familiar product among this product category ..................................... 16
    2.6.4 I buy the product, which stands out on the shelf ............................................................. 16
    2.6.5 I buy this product on the base of taste/performance ......................................................... 16
    2.6.6 I buy the product, which I always buy ............................................................................... 16
    2.6.7 I buy the product, which is on sale .................................................................................... 17
  2.7 Sampling ..................................................................................................................................... 17
    2.7.1 Probability Sampling ............................................................................................................. 17
    2.7.2 Non-Probability Sampling .................................................................................................... 17
  2.8 Convenience Sampling ............................................................................................................... 17
    2.8.1 Disadvantages of convenience sampling ............................................................................ 18
    2.8.2 Advantages of convenience sampling .................................................................................. 18
    2.8.3 Why we used convenience sampling .................................................................................. 18
  2.9 Data analysis .............................................................................................................................. 18
  2.10 Reliability ................................................................................................................................... 18
  2.11 Validity ........................................................................................................................................ 18
Acknowledgements

The authors have highly appreciated the supervision and support by Sofia Isberg, whose expertise and advice have been valuable in the process of writing. Her ability to explain complex concepts and methods in a simple way has been a relief for the authors.

Furthermore, the authors want to thank their parents who motivated them to study in Umea University.

Thank You,
Ammar Avais, Gulraiz Yaqoob.
Umeå 2010
The way consumers choose between different categories of grocery items on display at super markets depends on a number of behavior patterns and factors. The aim of this research was to know how consumer makes the selection in between the different product categories and how premier shelf space affects their decision making process. No doubt, there are so many factors, which can influence the consumer’s decision-making process for grocery shopping. In this research we studied the importance of seven factors on the sale of 12 product categories in ICA Alidhem stores.

A social survey was conducted and 96 filled questionnaires were collected from the different people who were living near to the ICA Alidhem store. Spss tool was used to analyze the data.

Likert scale was used to know the importance of these seven factors for the sale of 12 product categories and through our research we came to know that out of these seven factors, shelf space is the least important factor for 9 product categories studied. This result could be helpful for ICA Alidhem store for defining the planogram and for manufacturers of these 12 product categories as well. On the bases of mean value we defined the priority set and the purpose of this priority set is to know the importance of shelf space for these 12 product categories.
Introduction

According to the grocery retailer’s point of view, shelf space is one of the most important resources, which can help to attract more consumers in logistic decisions.

1.1 What is Shelf space?

Shelf space is the place allocated to the products on the retail shelves. Shelf space is very limited to the retailers, due to which retailers are very selective to stock the items and allocating them a proper shelf space is a big issue to them. But for the individual stock keeping units SKUs, shelf space is an important factor in the revenue, cost and eventual profit of the product category. Besides providing the shelf space biggest challenge is to provide the proper location to them. Proper shelf allocation is significant in product sale. Usually those items which are on the lower shelf usually get the less consumer attention than those items which are on the upper part of the shelves. So the items which are at the lower shelves will return with the lower sale and there is a chance they will get less benefits from the promotions (Nierop, Franses, 2006).

Grocery product retailer’s job is not easy especially when looking for profit-maximization shelf arrangement and at the same time meeting the manufacturer’s requirement. Through the shelf optimization measurement they can predict the effect of the shelf layout on the sale of different product categories and marketing effectiveness. A well defined shelf layout model could make the life of grocery product retailer easy (Nierop, Franses, 2006). Shelf space management refers to the point that products get proper place on the shelf so that maximum profit can be achieved and can avoid the situation of stock out.

Shelf space is a scarce and critical resource which must be allocated so as to optimize the profitability level of the assortment, and retail chains need methods for validating the pertinence of the shelf space allocation made by store managers (Desmet, Renaudin, 1998).

Management of the limited shelf space is most sensitive subject for all grocery retailers (Reyes & Frazier, 2005). New products development have already made shelf space management too complex, because now there are so many types of product available in the grocery stores and its quite difficult for the grocery retailers to decide which product needs how much of shelf space and similarly new product development has enriched the consumers with so many choices. Decision about the shelf space allocation and its management is critical to effective grocery retail operational management (Reyes & Frazier, 2005). A well-managed shelf space not only improves customer service by reducing out-of-stock occurrences; it can also improve the return on inventory investment by increasing sales and profit margins (Yang, 2001; Yang and Chen, 1999). Ideally, the decision rules regarding shelf space allocation should consider the profit contribution of each product in the category against the opportunity costs for carrying the inventory (Cox, 1964, 1970).

The context of self-service grocery retail stores is that the demand for a product is influenced by the quantity of display exposure, and it has been speculated that this structure of promotion is capable of shifting brand choices among consumers (Anderson, 1979; Urban, 2002). If we talk in another context then it is not true in our
1.2 BACKGROUND

Retailers especially those who are dealing with grocery products face a very large and highly complex set of marketing decisions. Averagely they keep 45,000 separate products and making the decision for these much of products are not an easy job.

They, retailers, are supposed to think all the way from whether a given item should be stocked and what the promotional strategy should be for an item. The competition among the grocery retailing stores is very tight and the proficiency with which these decisions are made ultimately determine the success or failure of the retailers (Chiang, Wilcox, 1997).

Grocery retailers left with two concerns. On one hand, they are looking for differentiation to avoid price competition. Through differentiation they can get the long term competitive advantage in consumer's mind. On the other hand, they are seeking productivity gains by cost reductions or economies of scale and integration of decisions to share experience (Yang, Chen, 1999). Retailers are suppose to take some critical decisions improve the sale of the different product categories and retain the customers. Grocery product retailers can do it in multiple ways. They can increase the sale by offering the price discounts or by increasing the in-store advertisement and by the improvement of the shelf space. The research mainly focuses on one of major merchandising decision: the allocation of space among different product categories in retail grocery store (Yang, Chen, 1999).

A well managed shelf space can not only decrease the inventory level but can also build the strong relationship with vendor and the higher customer satisfaction as well. Because if the retailers know exactly which product is high in demand and which one is low in demand then they can avoid over stocking of the product which is low in demand and it will eventually reduce their inventory level. And the product which is high in demand will never be stock-out. So in this way customers will be satisfied because they always find their desired product and retailers also reduced their inventory cost by managing the inventory efficiently (Yang, Chen, 1999).

1.2.1 Importance of Shelf space for manufacturers:

There is no doubt that shelf space is a valuable real estate. Shelf space costs heavily to the manufactures. Manufactures use considerable resources to secure this real estate because an improper location or under-allocation of space could kill the future of the product. Retailers work is also very hard at the same time because they do not want to waste the space by placing too many products on the shelf and at the same time they do not want to lose the sale by being out of stock (Dreze, Hoch, Purk, 1994).

Most of the manufactures are ready to pay the significant premiums to get the premium place in the store. Manufacturers usually spend 40 to 50% of their advertising budget on trade promotion. Manufacturer and retailer have the different prospective about the shelf space. The goal of the manufacturer is to increase the profit and sale of their products, so that is why they are always looking for the
premium place. Whereas the retailer’s perspective is quite different, they want to increase the category sales and profits (Dreze, Hoch, Purk, 1994).

Therefore a comprehensive knowledge and understanding of product categories and how consumers’ decision process varies from one product category to another is also essential.

1.3 Product Categories

The grocery stores contain different kind of products. These products can be divided into different categories. Hoyer & Walgren divided these products in 12 categories. These categories are Breakfast cereals, Toothpaste, Beer, Butter, Cake Mix, Chips, Cookies, Facial Tissues, Laundry Detergent, Loaf Bread, Toilet paper, Coffee. According to his finding these products are selected according to the different parameters. These parameters are price, always buy, satisfaction, recommendation, brand name, shelf space. According to his findings satisfaction parameter is over all dominating parameter in all categories but there are some other parameters are also there which has effect on particular product category. Like toilet tissues, facial tissues and butter is selected on the basis of price. Recommendation parameter is limited to beer, breakfast cereals and cookies. Always buy parameter is very much use in tooth pastes (Hoyer, Walgren, 1988).

There are five aspects of shelf space allocation through which grocery retailers can improve the performance of the store. These aspects are fixture location, product category location, item location within product categories, shelf space and Point of sale promotions. There are two commonly used techniques, which are used in commercial systems for allocating shelf space are the sales productivity method and the buildup method. The sales productivity method is used to allocate the shelf space to products according to the sales, while build up method is used to allocate the space to the products regardless to the sales. There is another approach known as space elasticity, this approach has been already used in many experimental studies. Space elasticity is defined as the ratio of relative change in unit sales to the relative change in shelf space (Yang, Chen, 1997). Shelf elasticity is not equal for the all the different product categories. Now it is very important to know that which product categories have highest shelf space elasticity so retailer can provide the space accordingly.

1.4 Research Question

How are consumers making the selection in different product categories when they shop from grocery store?

Consumers use the different purchasing tactics for different product categories. It is not possible for retailer to provide the premium shelf space to all the product categories. This research question will help us to know the different purchasing tactics about to the different product categories. It assumed that shelf space is not effective for all the different product categories. This research question will help us in differentiating those products whose sales are dependent on the shelf space position. Major six types of tactics are (Hoyer, Walgren, 1988)

*Price oriented tactics:* Buy the cheapest products, Buy the brand on Sale, and Buy the brand due to the discount coupon.

*Performance tactics:* Buy the brands which works best
Affect-related tactics: Buy the most familiar brand; buy the brand on liking base.
Normative tactics: Buy what my parent bought, buy what my friend advice.
In-store related tactics: Buy the first brand i see, buy the most prominently displayed.

1.5 Purpose

Purpose is to identify which product categories are shelf space dependant from a consumer’s perspective. By categorizing product into different categories, grocery retailers can develop the most effective shelf management plan. The sub purpose of this research is to provide the recommendation to the retailers so they can make a more effective planogram that can help them in increasing the sale and profit among the different product categories.

1.6 Limitation

1.6.1 Consumers
This study is limited to the students as a respondent, most of the consumers, to whom we interviewed through questionnaire, had the different nationality. Also this research is limited small part of the Alidhem, Umea, Sweden. On the behalf of this we can’t generalize this research to the entire population well.

1.6.2 Choice of Products
There are too many products in a grocery store so that’s why we adopted 12 product categories from the previous research. These items are different in their behavior e.g. price, brand, advertisement etc. These 12 different product categories are already tested in a research so that’s why it was the reliable combination for this research.

These product categories are not made in an American context. Rather, some of them are perhaps more related to an American context and not that common in a Swedish context. However, we choose to stick to them anyway because in our opinion these products are commonly purchased by the customers in Sweden. Another reason to choose them is that these products are available in many brands in every grocery store.

1.6.3 Choice of Store
This research is also limited to one store, ICA Alidhem Store, and all of our findings are based on this store. According to article (Desmet, Renaudin, 1998), consumer behavior also varies with the location, type and size of the store. So, to control these variables we restricted our research only to one store. These findings are only applicable to those, which are very much similar to ICA Alidhem store.

1.7 Term Definitions

1.7.1 Grocery Store
A store which is primarily established for retailing of daily use products. You can find the different product categories in it. For example, food, stationary, Sweets, Chocolates etc.

1.7.2 Product Categories
The term product categories define the number of the product categories available in the grocery store. Examples of product categories are Dairy Products, Meat, Kitchen Item, Cigarettes, and Vegetables and so on.

1.7.3 Manufacturer

Manufacturer term is used to represent the owner of the brand. Owner, who manufacture that brand and now want to sell it through grocery store.

1.7.4 Retailers

Retailer is the owner of grocery store. Who has the different product categories from different manufacturer? And he is selling these manufacturers through his grocery store.

1.7.5 Consumers

Consumers are representing those people, who physically visit the supermarkets or grocery store to purchase the grocery items.

1.7.6 Planogram

Planogram is basically a diagram of products, which show the most effective layout of these retail products.
Methodology

The purpose of the chapter is to describe the methodology, which is used to conduct this survey. This chapter will help the readers to know more about the sampling, methods to conduct the survey and type of analysis.

2.1 Methodological Assumption

It is very important to explain our methodological assumption. This part of the research will discuss what the reality is and how this research studies the reality. Ontology deals with the nature of social sciences. The main point of ontology is that whether the social entities are treated as objective entities which have reality external to the social actors or they should be consider as the social construction built up from the perception and actions of the social actors (Bryman & Bell, 2007, p. 19).

Methodological assumption deals with the collection of data. How data is collected to study the reality. Normally there are two approaches, quantitative approach and qualitative approach, to collect the data. Quantitative approaches are the scientific calculation approach to study the object. It uses the mathematics calculations to find the results. Quantitative approaches usually use the deductive approach; there is a theory in the beginning. On the base of theory, researcher defines the hypothesis and these calculations help the research to accept or reject the hypothesis. In contrast qualitative approach uses the observation; interviews to study the object, qualitative approach use the inductive approach and theory forms on the bases of findings (Bryman & Bell, 2007, p. 402).

For this research we used the quantitative approach on the basis of deductive approach. We started with the theory assumption to find out those product categories, which are shelf space dependent. A social survey was conducted to collect the data. Through mean value we defined the priority set for these 12 product categories.

We perceive this topic deal with the social phenomena and their meaning exist independently. Consumers use the different tactics to make the selection among the different product categories because every consumer has his own mind set and it is reality. We used this survey to study the reality that how consumers are making the selection among the different product categories. We studied the 12 product categories to know the importance of the shelf space for them.

2.2 Preconceptions

Authors are motivated to do research in a particular field because both have previous experience in FMCG products. Currently both are the students of Umea School of Business doing their Master of Science in Marketing. Before that both obtain the degree of MBA from Pakistan.

After doing MBA Ammar worked as a Key Account Executive in a cooking oil company. During this job author got the hands on experience in the field of marketing and managing the shelf space I different grocery retail store. The pervious knowledge
about the marketing strategies used by grocery stores motivated him to get more insight in this field.

Similarly Gulraiz also doing MBA worked as an Area Sales Officer in a Unilever Pakistan. He is also got the experience about the marketing strategies and sales promotions experienced by the companies in the grocery stores.

So the preexisting knowledge about the field inspired the authors to conduct the research in a different consumer market as both have work experience in Pakistan. For that they used different scientific journals and books to make the base of their research.

2.3 Research Strategy

2.3.1 Choice of Industry

We cannot ignore the importance of shelf space in different industry for example in garments sectors. Reason to select the grocery store is, at the same time retailers are dealing with the 45,000 separate SKUs in their store. Taking the decision for these SKUs is not an easy job.

A lot research has been done and discussed in the literature review. Providing an effective Planogram to retailers is hottest issue for those researcher who are working for the improvement of the retail grocery stores. Selection of this industry (grocery store) is also very much interested for us because we want to know that how shelf space can help the retailer to manage the different products categories to increase their business.

Sometime we can’t answer about our own purchase decision that why I select this product over the others. In our literature review we discussed that shelf space could be more effective even when consumers have unplanned shopping trip to grocery store. It has been discussed in the literature review that retailers can increase their profits through the proper planning of the shelf space in between the different product categories because a effective shelf space plan can encourage the consumers to put more things in their shopping baskets.

We select one grocery store because we want to know which product categories are shelf space dependent from the consumer’s perspective. A lot of experimental research has been done to know the importance of shelf space about the different product categories. But this time we did it through a simple questionnaire; through our questionnaire we took the opinion of the consumer about the different product categories and SPSS analysis was used conclude the results.

2.3.2 Why we select one store

Effect of shelf space in grocery store for different product categories also depends upon the location of the grocery store where it is situated and we cannot ignore the size of the grocery store as well. Because the grocery store which has the larger area can provide the more space to the shelves. There are so many reasons, such as location, competitive environment and store characteristics, due which we specified the store “ICA Alidhem Store”.

12
2.3.3 Location and Competitive environment

We cannot ignore the impact of location, where it is situated, and competition intensity of the store’s trade area. Directly or indirectly all of these affect the space elasticity. A store, which is situated in any area where the purchasing power of the people is low, will have the lower space elasticity comparatively those stores, which are situated in those areas where people have the high purchasing power (Desmet, Renaudin, 1998). So that’s why we it was very important to define the store and the population around the store because result could vary from location to location.

2.3.4 Specific Store Characteristics

If the store is larger in size it can provide the larger space for the shelves and importantly larger stores usually attract the more customers than the smaller one. Usually these customers patronize several points of sale and they are more sensitive to choice and impulse buying. They provide a higher demand per square meter as compare with small stores. This all leads to the higher space elasticity (Desmet, Renaudin, 1998). Thurik (1988) established the conclusion that space elasticity decreases with the store size. So it is very important to define the store size because these results are only applicable to those stores, which are of same size as ICA Alidhem store.

In the light of this discussion we can say that there are so many external factors that can affect the impact of shelf space on different product categories. All of these external factors force us to select any single store for this research.

2.3.5 Description of ICA Alidhem Store

ICA Alidhem store is situated in centre of the Alidhem Umea. You can find the different product categories of grocery from this store for example they have the varieties of bread, fish, dairy products, cheese and many other things in their store. They are also selling the ICA branded products in their stores. You can say, it’s a medium size store with lot of shelves in their store.

ICA Alidhem has their own planogram through which they divide the shelf space in different product categories. You can find the different product section in this store. Most of the people who are living near to the ICA Alidhem are students.

2.3.6 Choice of Product

Averagely grocery store has 45000 separate items. So it was not possible for us to cover all these product categories for this research. Due to the time constraint we selected the already tested product categories for this research.

Hoyer and Walgren, (1988) tested these products by asking the questions from 61 shoppers which are intercepted at supermarket. Through this survey authors revealed that these 12 product categories are varied in importance of selection among brands and frequency of purchase (On the behalf of these findings we can say that some of these product categories are selected on the base of brand and some these product categories are selected on the base of price. So these 12 product categories varied in number of ways from each other.
The names of these product categories are Breakfast cereals, Toothpaste, Laundry Detergent, Facial Tissue, Beer, Loaf Bread, Coffee, Chips, Bathroom tissue, Margarine/Butter, Cake Mix and Cookies

2.4 Research Design

Research design basically provides us the framework for the collection and the analysis of the data (Bryman & Bell, 2007, p.32). We can design the research in number of ways for example, Experimental research design, Cross-sectional research design, Longitudinal and case study. True field experiments are rare in the business and management research (Bryman & Bell 2007, p. 39). For conducting any experiment you are suppose to control many variables, which is not any easy job. Sometimes it is very expensive to conduct any experiment because of the equipment, location and so many other things. Longitudinal design is typically used to map the changes in business and management research (Bryman & Bell 2007, p. 51). Case study design entails the detailed and intensive analysis of a single case (Bryman & Bell 2007, p.53).

Cross-sectional design is also known as a social survey design. Cross-sectional design is entail the collection of data from more than one person and at a single point in time in order to get the quantifiable data in connection with two or more variables. Through different analysis then researcher detects the different pattern of associations among the variables (Bryman & Bell, 2007, p.48).

To conduct this survey we used the cross sectional research design because the idea of this research was to know those tactics which consumer used for the selection of these 12 product categories and these answered help us in prioritizing the shelf space between these 12 product categories

2.5 Research Approach

Research approach refers to methodology that has been adopted to conduct the survey. It defines the methods through which the data is supposed to be collected. There are two research approaches through which data could be conducted. These are qualitative research approach and quantitative research approach.

Quantitative research approach is used for the collection of data. Broadly it is defined as collection of numerical data and as exhibiting a view of relationship between theory and research (Bryman&Bell, 2007,p. 69). Quantitative research is widely used in social sciences such as sociology, anthropology and political science. This research approach refers to the systematic empirical investigation of quantitative properties and their relationships. The objective of quantitative research is to develop mathematical models, theories and hypothesis pertaining to phenomena. Usually for quantitative research we collect the data through structured interviews and questionnaires.

Quantitative research approach is used in this research and questionnaires were used to use to collect the data from the consumers. This approach is used because we want to know the tactics which consumer used while making the selection in between the different product categories. In the sense of ontology we believe that quantitative survey of this kind proved more effective while dealing with the objectivity from
participant responses because we can quantify the participant responses. There were so many reasons due to which we selected this approach. Firstly, the quantitative research was more economical and time saving. Suppose if we just talk about the qualitative research, a lot of time and effort was required to contact with the people to conduct the interview and similarly for the interviews. Quantitative research allowed us to conduct the data through questionnaire. Secondly, quantitative research uses the deductive approach. It helped us in designing all the part of our study more carefully before collecting the data. Thirdly, we want the mathematical number and graphs to present our result. These mathematical figures helped us define those product categories.

Main purpose of this study was to know the importance of shelf space for different product categories from the consumer’s perspective. Quantitative research helped us to find to the answer of this question. This approach helped us to know the relative importance of shelf space for these 12 product categories.

2.5.1 Instrument to collect the data

Questionnaires were used to collect the data. Main advantage of using the questionnaire is, they are quick and cheap to administer (Bryman & Bell, 2007, p. 142). Whereas questionnaire has some disadvantages, there is a possibility that participant might misinterpret it.

The aim of these questionnaires was to know the how people select the product from the product category and which product category is more shelf space dependent? We found it as a most suitable instrument because it allowed us to collect from number of people. And through this approach, we minimized the influence of the people and researcher on our findings.

Simple questionnaire was designed for the people and simple answers were sought from the people. We designed the same questions for all the different 12 product categories because we want to measure these 12 product categories on a same scale, otherwise it could create the conflict in the result. All the questions in the questionnaire were close ended and we did not use the negative question. There was not any leading question in our questionnaire.

2.6 Structure of the questionnaire

In the opening statement of the questionnaire we clearly mentioned that “we are the student of Umea University and just want to know your shopping experience in ICA Alidhem store”, purpose of this statement was to ensure the people that this survey is purely for the educational purpose and there is not any other reason behind it, so people can quote the honest answers. And the second part of the statement clearly mentioned that we don’t want to know the name of product, we just want to know how you select the product. In the opening statement of these 12 product categories, we start it from the imaginations. May be people don’t purchase all of these 12 product categories, so that’s why we ask them to imagine if they are suppose to purchase all of these 12 product categories from ICA Alidhem store then how they will select the product from the product category.
First three questions were the general questions; reason to ask these questions was to know the consumer’s frequency of visits to any grocery store, their monthly spending for the grocery products and we want to know that how many consumers, from our sample, make the shopping list before they leave for the grocery shopping. Reason to ask these three questions was to develop some understanding about the consumers. These demographics questions helped us to know the importance of shelf space for them. These questions helped us to find out the importance of shelf space for those people who define the shopping list and who do not defined the shopping list. They also helped us to find out the relationship between the importance of the shelf space and the monthly spending.

To analyze these 12 different product categories, we asked the 7 simple questions against each product categories. Reason to ask seven question is, we want to know the basis of selection. We want to differentiate those products that have the high shelf space elasticity. We measured the answer of these seven questions through Likert scale (1 to 5). Reason to use the Likert scale was to know the importance of shelf space for these 12 product categories. We asked the following questions against each product category.

2.6.1 Price of this product is

It was our first question against 12 different product categories. And reason to ask this question was to know that how much price is important, to consumer, for selecting the product. Through the Likert scale (very important to not important) we measured the answers. This question helped us to know the importance of price for these different 12 product categories.

2.6.2 Suggestions of other people are

How much recommendation or suggestions from other people are important for selecting the product. Reason to ask this question was to know the importance of suggestions and recommendations against these 12 different product categories.

2.6.3 I buy the most familiar product among this product category

Reason to ask this question was to know that how much the consumer is open to try the new brands. This question could be helpful to know which product category is selling on the bases of familiarity.

2.6.4 I buy the product, which stands out on the shelf

Reason to ask this question was to know the importance of shelf space for these 12 different product categories. This question could be helpful to know which product category is selling on the base of shelf space.

2.6.5 I buy this product on the base of taste/performance

Reason to ask this question was to know how many of these 12 product categories are selling on the bases of taste or performance.

2.6.6 I buy the product, which I always buy
Reason to ask this question was to know how much consumer is open, among these 12 different product categories, to experience new brand of the product category. If the consumer is strongly agree with any product category then its mean there is a very little chance for the other products in the same product categories.

2.6.7 I buy the product, which is on sale

Reason to ask this question was to know the importance of the sale promotions (buy one get one free, 50% off) are important for these 12 different product categories. Can retailer increase their profit by introducing the different sale promotions?

2.7 Sampling

According to Sweden Statistics, Total population of Umea is 114,075 (2009). We conducted this research in Alidhem Centrum because our targeted ICA store exists in the Alidhem Centrum. We choose 96 number of respondents because we assumed that there are 5000 people who are living near to the Alidhem Centrum. Confidence level is a percentage which reflects the degree of certainty in the research. If the value fall in this degree then it is consider as valid value. For this research we choose confidence level of 95% and confidence interval of 10. On the base of confidence interval and confidence level, the required sample size is 96 people (cases).

We preferred those building where we had the reference and distribute the questionnaires. All of these questionnaires were distributed on 20th April 2010 and collected on 28th April 2010 so the participants had the sufficient time to fill these questionnaires. Some of these questionnaires were not properly filled so that’s why it was not possible for us to include them.

2.7.1 Probability Sampling

It is a type of sampling methods that utilizes the form of random selection. Random selection assures that the different units in population have equal probabilities of being chosen(William M.K. Trochim, 2006).

2.7.2 Non-Probability Sampling

In this method, all the units in population have not equal probability of being chosen. For this research we will use the non-probability random sampling (convenience sampling). There are so many reasons for not using the probability sampling. Firstly, it was not possible for us to get the access to all the people who are living near the Alidhem Centrum. Contacting a randomly selected people is not a easy job Secondly, in case of random sampling we were suppose to spend more money and it required a lot of time to contact with a randomly selected people.

2.8 Convenience Sampling

A convenience sampling is a type of random sampling that allows you to stop anybody in the street when you wander around your location (Bryman&Bell, 2007, p. 105). Suppose if you are conducting the survey about any restaurant, it will allow you to stop anybody to get the information if the other person is also agree to do this. In simple words we can say that convenience sampling allow the researcher to find out the sample which is easily available to him. There is not any randomness in it.
2.8.1 Disadvantages of convenience sampling

As there are lots of people living near to the ICA Alidhem, one of the biggest problems with the convenience sampling was that most of the respondents are students and our friends who probably have the similar social surroundings and characteristics. So through this sampling technique we cannot generalize the results for the whole population.

2.8.2 Advantages of convenience sampling

This sampling technique was very helpful for us to contact with the 96 people in a shorter time. Convenience sampling helped us in saving the time and resources to get the questionnaires filled.

2.8.3 Why we used convenience sampling

It was the most feasible technique for us because we had some references in the building, which are near to the ICA Alidhem store. One the base this sampling technique we want to use that reference to get our questionnaire filled.

2.9 Data analysis

All the data collected from the designed questionnaires were processed and analyzed through the SPSS tool. The SPSS tool helped us to process the data in the form of numbers and percentages. Overall the SPSS results differentiate those products, which are shelf space dependent. We did the descriptive analysis to find out the percentage and mean value of these factors against 12 product categories.

2.10 Reliability

Questionnaires were used to collect the data from the different people who are living near the ICA Alidhem store. We consider the sample size as the main limitation of this study because the sample size cannot represent the whole population. However, having the right target people which are doing the shopping from ICA Alidhem store, we can say that this sample size can represent the trend and behavior that how consumers make the decision among these 12 different product categories. To increase the reliability, we ensured it by asking a simple question from the respondent either he has ICA Alidhem shopping experience or not.

2.11 Validity

The validity refers the issue that either these scales are measuring that concepts that they are suppose to measure. Either these scales or questions are valid and measuring the same concept which is actually expected. To assure the validity of the questionnaire and the validity of our research work, we extract the products and the questions from the other research work (Hoyer and Walgren, 1988). These questions and products are already tested. On the behalf of these research works we can say that we have the valid questions and products for our research work.
Theories and Studies about Shelf Space

The purpose of this chapter is to describe the relevant literature about the shelf space. This chapter will describe the shelf space from the different prospective and readers can also know more about existing studies relevant to this topic.

We develop the base of our research through literature. With the help of literature review we develop a theoretical and contextual framework of our study. In this part we make a discussion about the different aspects of shelf space, space elasticity, consumer behavior, product categories and the marketing importance of shelf space allocation management. So the literature review gives us the idea that what is already done in shelf space allocation management, what kinds of studies have been conducted and its effect on consumers. We divide this chapter in two parts: the first part discusses the concept of shelf space in retail grocery stores while the second part discusses how product categories are affected by the shelf placement and what the consumer behavior while selecting different products is. In this chapter we present the main results about shelf space and product categories in general, after that how consumer select products in grocery retail shops.

3.1 Why Should Shelf Space Matter?

No one can deny the importance of shelf space; change in shelf space can affect any brand or product categories in two ways. First, change in the shelf space could result in the form of out of stock. Simply retailers cannot sell those things, which are not in his stock. From the field test it is stated that out of stock not matters a lot and retailers can decrease its effect by restocking it at least once in a day. Secondly, change in the shelf space can change the consumer attention. There is chance that changing in the shelf position or shelf facing could change the consumer purchasing decision. Retailers can improve its profits by shifting the consumers towards the high margin products or retailers can increase the profit by increasing the number of unplanned purchases in a shopping trip. (Dereze, Hoch & Purk, 1994)

Grocery shopping behavior suggests three characteristics through which consumer’s attention in the store could be influenced. First, when consumer is making the decision for grocery product, the information processing is more bottoms up than top down in nature (Hoch and Deighton 1989).

Through the long-standing survey of shopping behavior in grocery store, it has been noticed that 1/3 of the purchases are specifically planned in advance of visiting the store (Dagnoli 1987). Second type of consumers is those who show very low involvement in making decision when they are in-store. Usually they are doing by gathering the very little information (Hoyer 1984). In this way good shelf location have significant effect on the sale of the product. Third, most of the consumer shops from more than one store. Coca-Cola conducted a research in 1994 and according to that research consumers shop 2.2 times in a week. According to the research result, consumers visit the regular supermarkets 0.6 times in a week. And its mean that consumer shop from 3 to 4 different grocery store on regular basis in order to satisfy their needs. According to these characteristics of consumers retailers can attract customers by different means so that they spend more time in stores and purchase
more products. The goal of each retailer is to maximize the sale of the store. To achieve this goal they arrange temporary shelves; these temporary shelves can grab the attention of shopper more effectively and could result in the form of high spending. These temporary display have the large potential, their large display really affect the consumer decisions. Through manipulation, retailer can also improve the attention of existing display. They can use the multiple things to improve the display for example 1) by changing the location of the product in display. 2) Facing devoted to the products. 3) Product adjacencies (Dereze, Hoch & Purk, 1994).

3.2 Shelf Space and Consumer behavior

3.2.1 Product display in Stores

According to (Chronsell & Nauclèr, 2006), inventory concerns the assortment and the exposure of products in stores. This exposure or facing can also be used to promote the products by placing them at a proper place in the stores. Proper place means the shelf location, which cause the maximum attention of the consumers. Retailers place their inventory in such a way so that they can get the maximum profitability. The most prominent indicators for success in products are measuring the sales and profitability per square meter. To calculate profitability per square meter the area is divided into two zones, one is called hot zone and the other is called cold zone. When we talk about the hot zone it is that area where the sales of the products are higher than the mean. These zones are normally close to the cashier or special purpose areas, which are created for the promotional activities. While creating these zones some other aspects also need to be considered which are essential for these zones. These are lightening and the decoration of these zones. On the other hand if we talk about the cold zones, these are the zones where sale is comparatively low to the mean. These zones are normally at the entrance of the stores, lightening is normally soft at those areas and not well managed. These zones are also including those areas where unnecessary shelf space is allocated to the products. In our study we do not intend to measure these zones but we should know that what kinds of arrangements stores are normally used. How they divide their space and how they place the products in stores. The above-mentioned concepts are discussed to give the understanding of the different zones in the stores (Chronsell & Nauclèr, 2006).

There are two main objectives while managing the shelf space. The first and most important objective is to achieve the optimize level of profitability on the cost incurred on the space. The second objective is to create such interface between consumers and the products so that consumers can feel free to interact among the shelves. The most common rule, which is used by many retailers, is that the products, which sell more often, allocated more space to them. But in case of some product categories such as fast moving products like pasta the profitability is normally low so they are not provided as much space as to other products. In other techniques shelf space is calculated on promotional activities and special offerings. When the advertisement of some product category is increased then the shelf space for that product is increased normally. And also the categories associated with that product category will also get more shelf space because their sales are also expected to increase (Varley, 2001; Anderson, 1979).

Facing, refers to the products displayed on the shelves. It is the number of units situated together, next to each other. The principle of facings is; what you do not see
you do not buy. Using too few facings of one product result in lower sale but using too many does not result in a greater sale. In order to calculate the right amount of facings, computer programs calculates number of facings and shelf positions (Chronsell & Nauclèr, 2006).

The result of optimizing the shelf space allocation to the products is that customers buy more and also increase in profit. Different software and mathematical calculations are also used to find out the most profitable shelf space allocation for the products. Research shows that there is relation between profit and space per square meter and also for the whole space in the store (Zufryden, 1986). If the shelf space allocation is handled properly there are 5 aspects which can be helpful to increase profit. These aspects are namely product category location, item location within categories, off-shelf display, point-of-sale and fixture location. With help of different models and calculations the space allocation can be used in a better way both of profit maximization and increased sales of the certain brands (Yang & Chen, 1999). Shelf space allocation depends on the product category. The products which are considered as seasonal products normally get better space at peak and heavy and large products have to naturally receive more space. As mentioned earlier products are also arranged in different product categories and by customer characteristics. For example, all fruit is placed in the same area and products for children are placed in a lower level (Varley, 2001). Diez de Castro (2004) explains that there are some better positions for product displays and there are some inferior places for product display regarding the visibility and profitability of the products. When we talk about the profitability the maximum profit can be achieved from the shelf space which is at the height of hips. While on the other hand, at the top and at the bottom profitability is low. This is also true for the visibility; the maximum visibility is at the middle shelf. We discuss these issues because if products are placed at the right places as we discussed different location then retailers can earn maximum profit and they can be more competitive.

3.2.2 Shopping Behavior of Consumers

(Chronsell & Nauclèr, 2006) explains that there are three different types of shopping habits shown by the consumers, planned purchases, suggested purchases and impulse shopping. According to the planned purchase process the consumer planned his or her shopping and exactly knows that what is the size, price and the brand of the product? In this process consumer has a written list of purchases. According to the suggested purchase the consumer buys products, which are not on his or her shopping list but because of the sale promotions (50% off, Buy one get one free). And in last habit consumer buy those products which are not the shopping list and also not on any offering. This is impulsive shopping. For impulsive purchases the most important thing is the visibility and the placement of the product as over 70% of all purchases are made on impulse (Schultz, 2005). To increase the profitability of the products the impulsive purchase products should be placed at the busy areas of the store and they should be visible to the consumers (Varley, 2001). Point of purchase is the key place which can be used to obtain product attention and also for new promotions and extra offerings. More shelf space or off-shelf displays are common ways to catch the interest of the customer (Varley, 2001). Simonson and Winer (1992) also point out the relationship between display and quantity purchased. A more noticeably display make the consumer try other brands as well as buy the usual brand at the same time (Chronsell & Nauclèr, 2006).
3.3 The concept of shelf space allocation

The concept of shelf space allocation is not new. The shelf space is considered as the scarce resource since a long time ago and allocation this resource to retail products has long been considered by marketing professionals and researchers. Urban (1969) presented a mathematical model that included the number of facings of an item as a predictor variable of its demand rate. Since then, a great deal of research—Anderson and Amato (1974), Corstjens and Doyle (1981), Zufryden (1986), Bultez and Naert (1988), Borin et al. (1994), Urban (1998), among others—has investigated various aspects of the shelf-space allocation problem. More recently, issues such as wholesale prices (Martín-Herrán et al. 2006), national vs. private brands (Amrouche and Zaccour 2007), and multiple objectives (Reyes and Frazier 2007) have been incorporated into the shelf-space allocation decision. An aspect of most of the existing research, though, is that the location of the product on the shelves has no effect on the sales of a product (Russell & Urban, 2008). According to (Russel & Urban, 2008) it is because of the positioning of the products on the shelf. The products which are placed in vertical dimension more specifically on eye level and slightly below and in horizontal dimension near to aisles can affect the sales. Author supported his arguments by the Dreze et al. (1994) there is a statistically significant effect of vertical and horizontal positioning on the shelves for a number of categories, which resulted in an average difference in sales of 59 percent from the worst to the best position on the shelves. These studies show that the half of the categories had increased sales on the end of the display, while the other half prefers the center.

Larson et al. (2005) utilized RFID tags on shopping carts to investigate shopper “travel” in a supermarket and found, among other things, that shoppers tend to travel select aisles and tend to travel by short excursions into and out of the aisles. Most of the studies which have already done on the shelf space discussed the effect of product of location on the shelves. Shelves were divided into distinctive set by Yang and Chen (1999). According to these distinctive sets, demand of product is to be a function of shelf where it is placed, then allocated the number of facing on the shelf space. Yang (2001) developed experience base procedure to solve this problem. Lim et al (2004) also developed some models for the shelves allocations to facilitate up to 10 products and 4 shelves. The discrete nature of these models provides the same effect which is independent of the fact that where an item is located on shelf. These concepts are useful in understanding the product placement on the shelf. As our research question we want to find out shelf placement is important for which product categories so if we understand what procedures have been adopted for the product allocation on the shelves we better find the answer of our question.

For category managers the important decision is allocating a shelf facing or shelf space on the shelf. In retail stores shelf space is often consider as critical due to the intense competition for space for Stock Keeping Units SKU on the retail shelf among suppliers. From studies we come to know that different allocation patterns of shelf facing can affect the consumer awareness and perception about the product and also on the sales (Waller et al., 2009). According to this article if the shelf space for SKUs has decreased it shows negative impact on the profitability of the suppliers (e.g., Messinger and Narasimhan 1995). But on the other hand retailers are always has strong incentive to increase the assortments. It appears that if the assortments are reduced then the perception of the consumer about the assortment and the store choice
will be changed as they feel that this store do not have the much variety. But decrease in assortments can be achieved without changing the perception of the consumers by keeping the total category space constant and also the most popular products are not eliminated from the store. Waller et al., 2009 also state that if the slow selling SKUs which are not very popular are eliminated from the store the overall profitability of the store has been increased. They supported his argument by referring Schwartz (2004) that consumer feel more comfortable in making decisions when they are not overwhelmed with choices. There is another aspect which related to the shelf space allocation is Shelf stock out. This phenomenon deals with the consumer purchase behavior. According to the Waller et al., (2009) Stock-out means when the product is not available on the shelf or it is given less space so it finishes quickly. The stock-out has effect on the consumer, retailer and manufacturer. If consumers do not find desired product on the shelf they may purchase another product which results into the brand switching. This act of consumer effect the manufacturer because they loss the sales of their brand. On the other way if the consumers are brand loyal to that product then the possible action is that they purchase that product from another store which causes the store switching which effect the retailer’s sale and profitability. If this situation occurs repeatedly, it causes huge effect on the retailers as they lost sales and also on manufacturer as brand switching. Waller (2009) supported his arguments with the help of other researches as he mentioned that 31% US consumer would switch the store, 22% would substitute a different brand and 16% would delay the purchase. The products categories, which are frequently, purchased such as cereals the stock out situation more likely, cause the switch to the other item (Waller et al 2009).

This concept is very much related to our studies, as we also want to find out that which product categories are truly dependants on the shelf space. We also want to figure out that what are the other factors, which affect the product categories when the consumers select them. So that we get a clear picture how the products can be organized in the grocery stores.

Similarly Gourville and Soman (2005) presented that there are some product categories for example cereals, canned food, dairy products whose sale could be hurt if the assortment of that category increased. Reason is over choice, this over choice leads the consumer to purchase nothing.

According to Curhan 1972, FMCG (Fast Moving Consumer Goods) suffered more than the slower moving products if retailers change their shelf space. Wilkinson et al (1981) also support this statement that FMCG suffered with the change of shelf space. Anderson (1979) also presents the theoretical connection between retail shelf space and market share.

3.4 Category Management

Category management models, which are currently in use, are not new. They are evolved from the 1960’s literature. In 1961 Brown and Tucker presented the model of optimization of shelf space allocation. Also in 1961 Lee proposed a simple allocation model, which uses space elasticity as a demand of effect. As the research continued, Curhan in 1971 formalized the shelf space elasticity and able to provide the valuable synthesis of shelf space conceptual models experiments which provide the evidence that there is a relationship between the space allocated and the unit sales of the
product. Same kind of approach is adopted by Anderson and Amato (1974). While, Campo and Gijsbrechts has provided a recent literature review on this area.

According to the Yang (2001) the simple shelf space allocation model which is helpful in profit maximization of the store is controlled by the length of the shelf, the length of the product, the product profit per facing and bounds on number of facings. He also proposed a heuristic algorithm to solve this problem as a multi constrained knapsack problem. Other authors like Lim et al (2004) developed meta heuristic methods such as Tabu search and Squesky wheel Optimization to solve the simplistic model proposed by Yang(2001) as well as a simplified version of the Corstjens and Doyle (1981) model. Latest concept is presented by Chen and Lin (2007) which use the data mining approach to product assortments and shelf space allocation. In table 1 provides a brief outline of previous literature in the area of shelf space allocation models and their main features.

**Table1. List of some important contributions to shelf space allocation models (Ramaseshan, Achuthan&Collinson, 2008).**

<table>
<thead>
<tr>
<th>Authnr(s)</th>
<th>The model</th>
<th>Main features and method used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hansen and Heinsbroek (1979)</td>
<td>Shelf space allocation model as a constrained optimization problem</td>
<td>It is an extension of earlier models. Models the demand using the shelf space elasticity, past sales and shelf space allocation. Develops near optimal solution, using Lagrangian technique</td>
</tr>
<tr>
<td>Corstjens and Doyle (1981)</td>
<td>Shelf space allocation Model</td>
<td>Extends Hansen and Heinsbroek (1979) model by incorporating cross elasticities within the demand formulation. Develops branch and bound method</td>
</tr>
<tr>
<td>Corstjens and Doyle (1983)</td>
<td>Dynamic shelf space allocation model</td>
<td>Extends their previous model to a dynamic model incorporating product life cycle and consumer reference. Develops near optimal solution</td>
</tr>
<tr>
<td>Ziifryden (1986)</td>
<td>Dynamic programming formulation of shelf space allocation model</td>
<td>Extends the model by Corstjens and Doyle (1981) incorporating space elasticity and non-space factors such as price,</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Model Description</td>
<td>Description</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Bultez et. al. (1989)</td>
<td>SH.A.R.P. H model</td>
<td>This is an extension of SH.A.R.P. model integrating it with an asymmetric variant attraction model for the cross elasticities.</td>
</tr>
<tr>
<td>Bookbinder and Zarour (2001)</td>
<td>Shelf space allocation Model</td>
<td>This model incorporates Direct Product Profitability (DPP) consideration within the model by Corstjens and Doyle (1981).</td>
</tr>
</tbody>
</table>

The first category management model that integrates the shelf space allocation and the inventory decisions was developed by Borinet et al. (1994). Table 2 provides a brief account of the category management models available in the literature.

**Table 2. Integrated category management models (Ramaseshan, Achuthan & Collinson, 2008).**

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Model Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Borinet et al. (1994)</td>
<td>Category Management</td>
<td>This constrained optimization model integrates shelf space allocation and its influence on demand. They developed a heuristic method based on simulated annealing to maximize the category return on inventory.</td>
</tr>
<tr>
<td>Urban (1998)</td>
<td>Integrated category Management</td>
<td>This model improves the model of Borinet et al. (1994) by separating the consequences of backroom and displayed inventories and by keeping track of the competitive and complementary product considerations. They</td>
</tr>
</tbody>
</table>
Hwang et al. (2005) Integrated category The model distinguishes the product display levels in the shelf. A gradient search heuristic and a genetic algorithm were proposed to solve the model while maximizing the average net profit

Despite the academic literature, much commercial software is also developed to manage shelf space allocation through non optimal methods. Apollo (Information Resource) and Spaceman (ACNielsen) are the examples of such software. These softwares worked on the specific type of factors which are considered to be relevant to the allocation of the shelf space. These factors are turnover, profit margins and constraints such as inventory costs. According to some authors such as Dreze et al (1994) these programs assist in investigating the alternate shelf space allocation through simulation, while other authors like Desmet and Renaudin (1998) these software packages cannot be consider as optimization tool.

After so many years the emphasis of shelf space and product assortment models has been shifted towards an integrated category management optimization model. Now retailers have to make number of decisions like what kind of products need to stock on the shelf (assortment decisions), the number of facings to allocate to each product (shelf space allocation decision), the level of ordering and the frequency of assortment evaluation or review (Ramaseshan, Achuthan & Collinson, 2008).

As we studied these models which are discussed in previous section we came to know that nowadays, more emphasis is on the product category management, which is relevant to our research. As we also looking for the answer that which product categories are really dependent on the shelf space and which are not. So these previous studies are quite helpful in understanding the logic behind the shelf space allocation and product categories.

3.5 Allocating space between product categories

Category management is often defined as the process of managing a collection of brands in the same product line. This is in contrast with traditional brand management, where buyers bought diverse products from the same supplier, regardless of the product line (Waller et al, 2009). Dussart (1998) points out that in practice, category management tends to be very focused on costs and profit of a category. Theory development in category management suggests that profit, sales, and market share are influenced by the mix of brands, SKUs and pricing, which may be
customized to match consumer demand at specific stores (Dupre and Gruen 2004). Because preferences may differ across regions in the country, category management strives to match assortments to consumer preferences in different regions. An important consideration in category management is how shelf facings are allocated to SKUs within a category. In this study we postulate and empirically test whether SKU dollar market share also may be impacted by the interrelationship between case pack quantity and facings allocation.

3.6 The managerial context

Through practice retailers now realize that by combining the shelf space together with other factors like promotion, price and promotion they can increase the overall sale of the store. There are few seasonal product categories. And during that season, retailers increase the shelf space of that product category. So consumer can find the product easily according to the demand. Retailers must need to ensure the shelf layout time by time because it’s a very limited resource. Selling a space is a very limited resource and these resource should be used correctly (Desmet & Renaudin 1998).

Development in category management enforces the retailers, manufacturers and researchers to allocate the shelf space within the product categories by using the bottom up approach rather than top down approach.

It is no more hidden from the retailers that the sale space varies from the product category; vary from the store characteristics and the environment where this store is located plays an important role in sale space elasticity. But most of the time they do not count these factors. Sometimes even they do not have the idea that how this new layout will effect to their profits because they are not counting the effects of environment and other factors on the shelf space elasticity (Desmet & Renaudin 1998).

3.7 The sales–space relationship

Through the literature review we can say that visual perception supports the view that good allocated shelf space has a positive influence on the sales of product or group of products. Consumers while walking around the store have a flattened cone of peripheral visions through which they unconsciously scan the products they pass (Phillips and Bradshaw, 1993), therefore, if the product has a larger display then there is maximum chance that it will get the consumer attention. The literature consider the shelf space as stock keeping space (Borin et al 1994) also provides the facts of casual effect of shelf space on sales. Because if the more space is allocated to product category then there is a less chance that it will get out of stock and in this way total sales of the category will increase (Desmet & Renaudin, 1998).

In literature it is also assumed that the marginal returns from the allocated shelf space are regressive: like there is fixed marketing saturation level. Now each additional space unit allocated to any product will return with less increase in sale as compare with previous one. This hypothesis results in the choice of a multiplicative power function with space elasticity less than 1 in the model of Corstjens and Doyle (1981, 1983) and Borin et al. (1994).” when then actual allocated space is far from optimal or even nonexistent, marginal returns are supposed first to increase and then to decrease in an S curve “(Bultez and Naert, 1988; Bultez et al 1989; Dreze et al. 1994).
Another research conducted by Anderson and Amato in 1974 presents the space allocation optimization models. A study was conducted by Corstjens and Doyle (1981, 1983) and in this study they highlight the role of sale space cross-elasticities which measure the sales responsiveness of one product due to the space allocated to other products. By considering all that things they designed the first shelf space allocation model incorporating interactions. And they came to know that cross elasticities among the product categories are lower than direct elasticities but they are significantly significant. Bultez and Naert (1988), Bultez et al. (1989) (sharp models), Borin et al.(1994) and Borin and Farris(1995) followed this direction by modeling the interaction in the items of different product categories through cross elasticities and symmetric or asymmetric attraction models.

Not any single model for items within a product category can be implementing in his original form because the reason is they are based on the assumption that demand interdependencies result from cannibalism within each product category which is entirely interdependent from other. In this case the cross elasticity between the product categories could be negative or positive because the size of the shopping baskets and shopping time are limited.

If we just take the reference of (Corstjens and Doyle 1981), we can say that sales-space relationship is a multiplicative power function with a saturation effect. But there are so many reasons due to which we cannot take the cross elasticities into account. Firstly, Corsjens and Doyle proved that space elasticity is higher than cross elasticity. Secondly through literature view we can see that significant value of cross elasticity is partly due to the type of the store from which the data is collected. Suppose if a store is dealing with only five product categories (Chocolates, toffees, candies, greeting cards and ice cream), these product could be easily the substitute of the others products. It does not seem like a case of supermarkets which are dealing with more products and therefore the cross-elasticity are likely to be a weaker and less crucial to study. Supermarkets have a higher number of products categories and it is very difficult to get the reliable estimates for cross elasticities. So that we will focus on the direct space elasticity among the product categories which modify the sales space relationship (Desmet&Renaudin, 1998).

3.8 Summary of theories

Shelf space is an expensive resource in retail stores and need to manage well. To manage shelf space efficiently one should know the proper divisions of the shelves and what are the most attractive spots on the shelves and how to measure these spots? Different products which are displayed in grocery stores have different in nature and need proper space allocation on shelves. By allocating proper space to these product categories grocery retailers can maximize their profit and also escaped from the stock-out situations. To allocate proper shelf space among different product categories the role of consumer is very important to understand. What type of consumers are and how they choose products is the key factors to decide which product category need how much space on the shelf.
Empirical observation and analysis

The purpose of this chapter is to present the findings of our questionnaire. This chapter deals with the findings, which we have during the survey.

As a part of data collection, 125 copies of questionnaire were distributed in different building near to the ICA Alidhem. By the end of 28th April, we were able to collect back the 96 copies of completely filled questionnaires. Convenient sampling was used to get these questionnaire filled, we used our references and tried to distribute the questionnaires to those area where we had the references.

Through first three question we tried to know how often consumer visit the grocery store, how often consumer make the shopping list before leaving for the grocery store and how much consumer like to spend for grocery shopping.

On the behalf of our result we can say that 6.3% of our targeted people visit the grocery store once in a month. 20.8% people visit the grocery store twice a month and 72.9% people visit more than two times in a week. On the behalf of these findings we can say that majority of the people visit the grocery store more than two times in a month.

Number of visit in a month

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid once in a month</td>
<td>6</td>
<td>6,3</td>
<td>6,3</td>
<td>6,3</td>
</tr>
<tr>
<td>twice in a month</td>
<td>20</td>
<td>20,8</td>
<td>20,8</td>
<td>27,1</td>
</tr>
<tr>
<td>more than two times</td>
<td>70</td>
<td>72,9</td>
<td>72,9</td>
<td>100,0</td>
</tr>
<tr>
<td>Total</td>
<td>96</td>
<td>100,0</td>
<td>100,0</td>
<td></td>
</tr>
</tbody>
</table>

Whereas 68.9% of our targeted people spend less 2000 sek for the grocery shopping, 25% people spend more than 2000 but less than 4000 sek. 5.2% spend more than 4000 but less then 6000 sek for their grocery shopping. From this findings we can say that majority of the people spend less then 2000sek for their grocery shopping.
### Spending in a month

|                      | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------------|-----------|---------|              |                   |
| Valid less than 2000 | 67        | 69,8    | 69,8         | 69,8              |
| 2001 to 4000         | 24        | 25,0    | 25,0         | 94,8              |
| 4001 to 6000         | 5         | 5,2     | 5,2          | 100,0             |
| Total                | 96        | 100,0   | 100,0        |                   |

16.7% people always make the shopping list before leaving for the grocery shopping. 54.2% people said, most of the time they make the shopping list but not for every time where as 29.2% people never make the shopping list before leaving for the grocery shopping. On the behalf of these findings we can say that majority of the people make the shopping list before leaving for the grocery shopping.

### Shopping list

|                      | Frequency | Percent | Valid Percent | Cumulative Percent |
|----------------------|-----------|---------|              |                   |
| Valid every time     | 16        | 16,7    | 16,7         | 16,7              |
| Most of the time     | 52        | 54,2    | 54,2         | 70,8              |
| Never                | 28        | 29,2    | 29,2         | 100,0             |
| Total                | 96        | 100,0   | 100,0        |                   |

Seven questions were asked from the respondents, against these 12 different product categories, to know the importance of different factors in their purchase decision. Respondent were asked to imagine that they are purchasing these products from ICA Alidhem Store. A Likert scale was used to measure the importance of these factors. After compiling the data in SPSS we got the following results for these product categories.
4.1 Breakfast Cereals

This graph is representing the importance of different factors for the purchase of breakfast cereals. Through the questionnaire results we can say that consumers always give the priority to those brands, which they always buy. On the behalf of our respondent we can see that regular purchase brand has the maximum share because it has the lowest mean value, 2.2083, among other factors. And if we rank these seven factors, on the behalf our results, with respect to the most important factor to least important factor for breakfast cereal, it will look like this:

<table>
<thead>
<tr>
<th>Most important</th>
<th>Buy which they always buy</th>
<th>2,2083</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of price</td>
<td>2,3542</td>
<td></td>
</tr>
<tr>
<td>Taste</td>
<td>2,4167</td>
<td></td>
</tr>
<tr>
<td>Familiar brand</td>
<td>2,6771</td>
<td></td>
</tr>
<tr>
<td>Sale Promotion</td>
<td>2,7604</td>
<td></td>
</tr>
<tr>
<td>Recommendation of people</td>
<td>2,9063</td>
<td></td>
</tr>
<tr>
<td>Importance of Shelf Space</td>
<td>3,0833</td>
<td></td>
</tr>
</tbody>
</table>
4.2 Toothpaste

This graph is representing the importance of different factors for toothpaste. According to the mean value of these seven factors we can say that consumer prefer to buy the same brand of toothpaste which he always buy because regular buy has the lowest mean value (2.3542) whereas mean value of price (2.3750) is also very close to it. And if we rank these seven factors with respect to the most important factor to least important factor it will look like this:

<table>
<thead>
<tr>
<th>Most Important</th>
<th>Least Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buy the brand which I always buy</td>
<td>2.3542</td>
</tr>
<tr>
<td>Importance of price</td>
<td>2.3750</td>
</tr>
<tr>
<td>Sale Promotion</td>
<td>2.4063</td>
</tr>
<tr>
<td>Familiar brand</td>
<td>2.4583</td>
</tr>
<tr>
<td>Taste</td>
<td>2.7708</td>
</tr>
<tr>
<td>Recommendation of people</td>
<td>2.7917</td>
</tr>
<tr>
<td>Importance of Shelf Space</td>
<td>2.9063</td>
</tr>
</tbody>
</table>
4.3 Beer

This graph is showing the share of each factor in the sale of beer. According to the mean value of these seven factors we can say that the most important factor for the sale of beer is price because price has the lowest mean value (2.0729). And if we rank these seven factors with respect to the most important factor to least important factor it will look like this.

<table>
<thead>
<tr>
<th>Most important</th>
<th>Importance of price</th>
<th>2.0729</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buy the brand which I always buy</td>
<td>2.3125</td>
<td></td>
</tr>
<tr>
<td>Recommendation of people</td>
<td>2.3854</td>
<td></td>
</tr>
<tr>
<td>Buy the familiar brand</td>
<td>2.4583</td>
<td></td>
</tr>
<tr>
<td>Taste</td>
<td>2.5000</td>
<td></td>
</tr>
<tr>
<td>Importance of shelf space</td>
<td>2.7813</td>
<td></td>
</tr>
<tr>
<td>Sale promotion</td>
<td>2.8021</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Least important</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
<td></td>
</tr>
<tr>
<td>Recommendation</td>
<td></td>
</tr>
<tr>
<td>Familiar brand</td>
<td></td>
</tr>
<tr>
<td>Shelf Space</td>
<td></td>
</tr>
<tr>
<td>Taste</td>
<td></td>
</tr>
<tr>
<td>Regular Buy</td>
<td></td>
</tr>
<tr>
<td>Sale</td>
<td></td>
</tr>
</tbody>
</table>
This graph is representing the share of each factor for the sale of butter. According to the mean value of these seven factors we can say that the taste is the most important factor for the sale of butter because it has the lowest mean value (2.0319). And if we rank these seven factors on the behalf of most important to least important it will look like this:

<table>
<thead>
<tr>
<th>Most Important</th>
<th>Least Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taste</td>
<td>Importance of Shelf Space</td>
</tr>
<tr>
<td>Importance of Price</td>
<td>Sale Promotion</td>
</tr>
<tr>
<td>Buy the brand which he always buy</td>
<td></td>
</tr>
<tr>
<td>Buy the familiar brand</td>
<td></td>
</tr>
<tr>
<td>Recommendation of people</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Factor</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taste</td>
<td>2.0319</td>
</tr>
<tr>
<td>Importance of Price</td>
<td>2.0638</td>
</tr>
<tr>
<td>Buy the brand which he always buy</td>
<td>2.2553</td>
</tr>
<tr>
<td>Buy the familiar brand</td>
<td>2.5319</td>
</tr>
<tr>
<td>Recommendation of people</td>
<td>2.5426</td>
</tr>
<tr>
<td>Importance of Shelf Space</td>
<td>2.7979</td>
</tr>
<tr>
<td>Sale Promotion</td>
<td>2.8085</td>
</tr>
</tbody>
</table>
This graph is representing the contribution of these seven factors on the sale of cake mix. According to the mean value of these seven variables we can say that price is the most important factor for the sale of cake mix because it has the lowest mean value (1.6915). On the behalf of our analysis if we rank these seven factors from the most important to least important it will look like this

<table>
<thead>
<tr>
<th>Most Important</th>
<th>Importance of price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of price</td>
<td>1.6915</td>
</tr>
<tr>
<td>Recommendation of people</td>
<td>2.1702</td>
</tr>
<tr>
<td>Taste</td>
<td>2.2979</td>
</tr>
<tr>
<td>Buy the familiar brand</td>
<td>2.5319</td>
</tr>
<tr>
<td>Buy the brand which I always buy</td>
<td>2.6170</td>
</tr>
<tr>
<td>Sale promotion</td>
<td>2.6277</td>
</tr>
<tr>
<td>Importance of Shelf Space</td>
<td>2.9894</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Least important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
</tr>
<tr>
<td>Recommendation of people</td>
</tr>
<tr>
<td>Familiar brand</td>
</tr>
<tr>
<td>Shelf Space</td>
</tr>
<tr>
<td>Taste</td>
</tr>
<tr>
<td>Regular Buy</td>
</tr>
<tr>
<td>Sale</td>
</tr>
</tbody>
</table>
This graph is representing the importance of each factor for the sale of Chips. According to the mean value we can say that taste is the most important factor for the sale of chips because it has the lowest mean value (2.00). On the behalf of our analysis if we rank these seven factors from most important to least important It will look like this

<table>
<thead>
<tr>
<th>Most important</th>
<th>Taste</th>
<th>2.00</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Buy which I always buy</td>
<td>2.3191</td>
</tr>
<tr>
<td></td>
<td>Importance of price</td>
<td>2.4362</td>
</tr>
<tr>
<td></td>
<td>Recommendation of people</td>
<td>2.5426</td>
</tr>
<tr>
<td></td>
<td>Sale promotion</td>
<td>2.5532</td>
</tr>
<tr>
<td></td>
<td>Buy the familiar brand</td>
<td>2.6064</td>
</tr>
<tr>
<td></td>
<td>Shelf Space</td>
<td>2.8298</td>
</tr>
</tbody>
</table>
This graph is representing the importance of each factor for the sale of coffee. On the base of our analysis we can say that price is the most important factor for coffee because it has the lowest mean value (2.0851). If we rank these factors, on the base of this analysis, from the most important to least important it will look like this:

<table>
<thead>
<tr>
<th>Most Important</th>
<th>Importance of Price</th>
<th>2.0851</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Taste</td>
<td>2.0957</td>
</tr>
<tr>
<td></td>
<td>Buy which I regular buy</td>
<td>2.2553</td>
</tr>
<tr>
<td></td>
<td>Recommendation of people</td>
<td>2.3298</td>
</tr>
<tr>
<td>Least Important</td>
<td>Most familiar brand</td>
<td>2.5319</td>
</tr>
<tr>
<td></td>
<td>Sale promotion</td>
<td>2.9574</td>
</tr>
<tr>
<td></td>
<td>Shelf Space</td>
<td>2.9681</td>
</tr>
</tbody>
</table>
4.8 Cookies

This graph is representing the share of each factor for the sale of cookies. According to the mean value we can say that the taste is the most important factor for the sale of cookies because the taste has the lowest mean value (2.0851). On the behalf of our analysis if we rank these factors from the most important to least important it will look like this:

<table>
<thead>
<tr>
<th>Most Important</th>
<th>Taste</th>
<th>2.085</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Importance of Price</td>
<td>2.1383</td>
</tr>
<tr>
<td></td>
<td>Recommendation of people</td>
<td>2.3404</td>
</tr>
<tr>
<td></td>
<td>Buy the brand which I regular buy</td>
<td>2.6915</td>
</tr>
<tr>
<td></td>
<td>Sale Promotion</td>
<td>2.7340</td>
</tr>
<tr>
<td></td>
<td>Most familiar brand</td>
<td>2.7447</td>
</tr>
<tr>
<td></td>
<td>Shelf Space</td>
<td>2.7979</td>
</tr>
<tr>
<td>Least Important</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.9 Facial Tissue

This graph represents the importance of each factor in the sale of Facial Tissue. On the behalf of mean value we can say that the most important factor for the sale of facial tissue is price because it has the lowest mean value (2.0521). On the behalf of our analysis, if rank these factors from the most important to least important it will look like this:

<table>
<thead>
<tr>
<th>Most Important</th>
<th>Importance of Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buy the brand which I regular buy</td>
<td>2.0521</td>
</tr>
<tr>
<td>Sale promotion</td>
<td>2.2396</td>
</tr>
<tr>
<td>Performance base</td>
<td>2.3750</td>
</tr>
<tr>
<td>Recommendation of people</td>
<td>2.6458</td>
</tr>
<tr>
<td>Most familiar brand</td>
<td>3.0625</td>
</tr>
<tr>
<td>Importance of shelf space</td>
<td>3.1982</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Least important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price</td>
</tr>
<tr>
<td>Recommendation</td>
</tr>
<tr>
<td>Familiar brand</td>
</tr>
<tr>
<td>Shelf Space</td>
</tr>
<tr>
<td>Performance</td>
</tr>
<tr>
<td>Regular Buy</td>
</tr>
<tr>
<td>Sale</td>
</tr>
</tbody>
</table>
This graph is representing the importance of each factor for the sale of laundry detergent. According to the mean value we can say that price is the most important factor for the sale of laundry detergents because it has the lowest mean value (1.8229). On the behalf of our analysis if we rank these factors from most important to least important it will look like this:

<table>
<thead>
<tr>
<th>Most Important</th>
<th>Importance of price</th>
<th>1.8229</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommendation of the people</td>
<td>2.4479</td>
<td></td>
</tr>
<tr>
<td>Buy the brand which I always buy</td>
<td>2.4479</td>
<td></td>
</tr>
<tr>
<td>Importance of performance</td>
<td>2.6146</td>
<td></td>
</tr>
<tr>
<td>Sale promotion</td>
<td>2.6979</td>
<td></td>
</tr>
<tr>
<td>Most familiar brand</td>
<td>2.7292</td>
<td></td>
</tr>
<tr>
<td>Importance of shelf space</td>
<td>2.8229</td>
<td></td>
</tr>
<tr>
<td>Least Important</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.11 Loaf Bread

This graph is representing the share of each factor on the sale of loaf bread. On the behalf of mean value we can say that there are two main (price and taste) factors for the sale of loaf bread because both of them have the lowest mean value (2.0532). On the behalf of analysis if we rank these factors from most important to least important if will look like this

<table>
<thead>
<tr>
<th>Most Important</th>
<th>Importance of price</th>
<th>2.0532</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taste</td>
<td>2.0532</td>
<td></td>
</tr>
<tr>
<td>Buy the brand which I always buy</td>
<td>2.4787</td>
<td></td>
</tr>
<tr>
<td>Most familiar brand</td>
<td>2.5213</td>
<td></td>
</tr>
<tr>
<td>Sale Promotion</td>
<td>2.6489</td>
<td></td>
</tr>
<tr>
<td>Recommendation of people</td>
<td>2.6809</td>
<td></td>
</tr>
<tr>
<td>Importance of Shelf Space</td>
<td>3.0</td>
<td></td>
</tr>
</tbody>
</table>
This graph is representing the importance of each factor for the sale of toilet paper. On the behalf of mean values we can say that the price is the most important factor for the sale of toilet paper because it has the lowest mean value (1.6702). According to the analysis if we rank these factors from the most important to least important it will look like this:

<table>
<thead>
<tr>
<th>Importance</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most Important</td>
<td></td>
</tr>
<tr>
<td>Toilet paper on sale</td>
<td>2.3085</td>
</tr>
<tr>
<td>Buy which I regular buy</td>
<td>2.4043</td>
</tr>
<tr>
<td>Importance of shelf space</td>
<td>2.6596</td>
</tr>
<tr>
<td>Performance</td>
<td>2.6915</td>
</tr>
<tr>
<td>Recommendation of people</td>
<td>2.8617</td>
</tr>
<tr>
<td>Most familiar brand</td>
<td>2.9468</td>
</tr>
<tr>
<td>Least Important</td>
<td></td>
</tr>
<tr>
<td>Recommendation</td>
<td></td>
</tr>
<tr>
<td>Sale</td>
<td></td>
</tr>
<tr>
<td>Taste/ Performance</td>
<td></td>
</tr>
<tr>
<td>Regular Buy</td>
<td></td>
</tr>
<tr>
<td>Shelf Space</td>
<td></td>
</tr>
<tr>
<td>Familiar Brand</td>
<td></td>
</tr>
<tr>
<td>Recommendation</td>
<td></td>
</tr>
<tr>
<td>Price</td>
<td>1.6702</td>
</tr>
</tbody>
</table>
4.13 Crosstabs

4.13.1 Number of visits to any grocery store vs importance of shelf space

In order to find out the relationship between the importances of shelf space with the number of visits to any grocery store we ran the crosstabs. On the behalf of our findings we have the following result about these 12 product categories.

There are 6 people who visit the grocery store once in a month. These people are almost neutral for breakfast cereal, coffee and toilet paper because these three categories have almost equal number of people in agree, disagree and neutral category. Whereas people are almost disagreeing for toothpaste, laundry detergents, facial tissues, loaf bread, chips, cake mix and cookie with regards to the importance of the shelf space. But they are showing the importance of shelf space for beer and butter.

There are twenty people who visit any grocery store for twice in a month. They are neutral and agree with the importance of shelf space for the all product categories except for the beer. Most of the people are disagree with the importance of shelf space for beers.

There are seventy people who visit any grocery store for more than two times in a month. These people are neutral and disagree for the breakfast cereals and facial tissues with regards to the importance of the shelf space. Whereas majority of the people are agree and neutral for rest of the 10 product categories with regards to the importance of the shelf space.

4.13.2 Importance of shelf space VS monthly spending

There are 67 people who spend less than 2000 SEK, for grocery shopping, in a month. These people are collectively neutral and agree, on the importance of shelf space, for toothpaste, laundry detergent, beer, loaf bread, chips, toilet paper, butter and cookies. There are 24 people who spend in between the 2000 and 4000 SEK and these people are almost agree and neutral for all the 12 product categories with regards to the importance of the shelf space.

4.13.3 Importance of shelf space VS shopping list

There are 16 people who, every time, define the shopping list before leaving for any grocery store. And according to the findings these people are almost neutral and agree for all the product categories except breakfast cereals. There are 52 people who, most of the time, define the shopping list before leaving for grocery store and majority of them are agree and neutral on the importance of shelf space for all the product categories except coffee. There are 28 people who, never, define the shopping list before leaving for the grocery shopping and according to finding they are neutral and disagree on the importance of shelf space for breakfast cereals, loaf bread, facial tissue, coffee, chips, toilet paper, butter, cake mix.
Discussion and Conclusion

Discussion and conclusion about our findings is presented in this chapter. Readers can know the implication of these findings and what were the limitations in this research.

In this study we discussed about the different aspects of shelf space, consumer behavior, product categories and the marketing importance of shelf space allocation management.

The concept of shelf space allocation is not new. The shelf space is considered as the scarce resource since a long time ago and allocation this resource to retail products has long been considered by marketing professionals and researchers. Urban (1969). Objective of this research was to know the importance of shelf space for these 12 product categories. On the behalf of our findings we can say that consumer used the different tactics for the different product categories. Some of his decisions are based on the shelf space; some of his decisions are based on price. So consumer adopts the different way to make the selection among the different product categories. So retailers should have to consider the other factors before defining the Planogram. Only shelf space cannot increase the sale of the product categories. These finding could be effective for the manufacturer as well. They can also revise their marketing strategies according to these results. Suppose if there is a price war between their product categories then good price could be more effective than the shelf space. Similarly if the taste is the most important factor for any product category then definitely manufacturer should have to concentrate to improve the taste of the product, there is a very little chance that people will purchase those products are not good in taste.

5.1 Consumer behavior and shelf space

On the behalf of our findings we can say that consumers rate the importance of shelf space differently against the different product categories. And from these findings we also came to know that consumer rates many other factors before rating the shelf space. Shelf space is only effective if the product has competitive price, delicious taste and high performance.

On the behalf of our findings we can say for breakfast cereals and toothpaste, people are brand oriented and they always purchase the same brand, which they always buy. People are almost neutral for the importance of shelf space for these two product categories.

Beer, cake mix, coffee, laundry detergent, facial tissue, loaf bread and toilet paper are price dependent product. Consumers first consider the price before making the purchase decision. Shelf space could be only effective if these product categories have the competitive price.

Consumers select the Butter chips and cookies on the base of the taste. If the tastes of these products are according to the expectation of the consumer then consumer will evaluate the other factors. So for these three product categories shelf space could be only effective if the tastes of these products are good.
In sales-space relationship we discussed that the product on the shelf space create a positive impact on the consumers mind (Phillips and Bradshaw, 1993). But on the base of our findings we can say that although shelf space creates the positive impact on the consumer mind but these shelf spaces cannot force the consumer, for all the product categories, to purchase that product. Consumer will definitely not purchase that product if it is not as competitive as other products are.

5.2 Stock-out problem

In our literature review we discuss the concept of stock-out which is defined as when the product is not available on the shelf or it is given less space so it finishes quickly (Waller et al., 2009) as this concept is related to consumer behavior. The data that we have collected we can say that there are some categories which are sold on the basis of price like Beer, toilet papers, laundry detergents, coffee, cake mix and facial tissues and not according to the shelf space in the store. So it is very rare for these products to stock-out situation occur. But in our opinion these categories need more shelf space as compared to those products, which have higher prices then, these products. It is natural that these categories will be sold quickly so grocery retailer need to provide them proper shelf space.

5.3 Impulse Buying

From the consumer’s point of view impulse buying factor is also very important. We find out some categories, which are chosen by the respondents on the basis of taste. These categories are cookies, chips, and butter. According to our analysis these products are helpful to increase the impulse buying phenomena in the store. As people chose them on the basis of taste, whenever they see these products they will buy these products impulsively. So according to our analysis the shelf space plays a vital role in the placement of these product categories in the grocery store.

5.4 Category Management

As we mentioned in our literature review chapter that category management is defined as the process of managing the different brands in the same product line (Waller et al., 2009). This concept is also been used by the help our data. The product categories which are chosen on the basis of price particularly like coffee, beer, toilet papers, facial tissues, cake mix and laundry detergents are managed in a way that brands which has high prices are given less shelf space and the brands which have low prices must be given more space on the shelf. It is important because grocery retailer should know that which category of brand is selected on price so he can manage his inventory efficiently.

Category management cannot only be done on the basis of price. We find out there are some categories which are selected on the basis of brand name like breakfast cereals and tooth paste. So managing categories in these products grocery retailers should give these product categories a proper shelf space because if customers do not able to find these products he will not purchase these products from that grocery retailer and will go to the different retailer which leads to the customer lost and also the sales lost.
5.5 Shelf space allocation

Shelf space is the scarce resource in any grocery retail. Grocery retailers can save a lot of money by allocating proper shelf space to different product categories (Yang, Chen, 1999). Proper allocation of shelf space can reduce the inventory level which helps in maintaining the optimum inventory levels. With our finding we can easily analyze that which product category needs how much shelf space on the basis of which category. In our opinion the categories which are selected on the basis of price needs more shelf space as compared to the products of same category which has high price. So in this way retailer knows exactly which products need to store in large quantity and which needs to store in less quantity.

5.6 Profit Maximization

The most important factor for any grocery retailer is the profit maximization. According to our data the product categories which are important for impulse buying like cookies, chips and butter is critical for profit maximization. Because impulse buying is an additional sale which any grocery retailer can achieve by managing its shelf space efficiently. According to our finding 54.2% of respondents sometimes make the shopping list and 29.2% never make a shopping list so these are the prospective customers who can increase the impulse shopping. According to our analysis if grocery retailers give proper attention to these categories they can increase their profit.

5.7 Which product category needs the premier shelf space?

Shelf space is a very limited resource for any grocery store and this thing has been discussed for so many times in our literature review. In this research we tried to find out those product categories which need the premier shelf space. This research was limited to the 12 different product categories. Through the mean value we priorities these 12 products according to the premier shelf space. A question was asked, against each of these 12 product categories, to know the importance of shelf space and this result is concluded on the base of answers.
This graph is designed on the base of our findings, according to this graph we can say that, among these 12 different product categories, toilet paper needs the premier shelf space because it has the lowest mean value (2.651).

According to our finding we will priorities these products in this way.

<table>
<thead>
<tr>
<th>Priority</th>
<th>Product Name</th>
<th>Mean Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Toilet Paper</td>
<td>2.651</td>
</tr>
<tr>
<td>2</td>
<td>Beer</td>
<td>2.7813</td>
</tr>
<tr>
<td>3</td>
<td>Butter</td>
<td>2.7979</td>
</tr>
<tr>
<td>4</td>
<td>Cookies</td>
<td>2.7979</td>
</tr>
<tr>
<td>5</td>
<td>Laundry Detergent</td>
<td>2.8229</td>
</tr>
<tr>
<td>6</td>
<td>Chips</td>
<td>2.8298</td>
</tr>
<tr>
<td>7</td>
<td>Toothpaste</td>
<td>2.9063</td>
</tr>
<tr>
<td>8</td>
<td>Coffee</td>
<td>2.9681</td>
</tr>
<tr>
<td>9</td>
<td>Cake Mix</td>
<td>2.9894</td>
</tr>
<tr>
<td>10</td>
<td>Loaf Bread</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>Breakfast Cereals</td>
<td>3.0833</td>
</tr>
<tr>
<td>12</td>
<td>Facial Tissues</td>
<td>3.1982</td>
</tr>
</tbody>
</table>

This table could be helpful to the ICA Alidhem management for defining the planogram about these 12 product categories. The product which is at the top priority of the shelf space is toilet paper and which is at the least priority of the shelf space is facial tissue.
5.8 Conclusion

Shelf space is a very limited resource to share in between more than 45000 sku and especially in any self service grocery store. A premier shelf location can increase the sale of any product so that’s why manufacturers always try to get the premier shelf space for their products. Competition in between the product category has already made it complex and job of any retailer is not easy to distribute the proper allocation to each product categories. Shelf space is also a very expensive resource and manufacturers are paying high to get the premier shelf space. Goal of the retailer is to increase the profits and it could only be possible by increasing the spending of consumers in his unplanned shopping trips.

Consumers use the different tactics in making the selection among the different product categories. All of their decisions are not only based on the premier shelf space and it is not possible for any retailer to provide the premier shelf space to all the product categories. This studies find out that consumer used the different tactics in making the purchase decision in between the different product categories. Some of his decisions are based on the price, some of his decisions are based on brand and some of them are based on availability, taste and performance.

Purpose of this research was to know how consumer makes the selection among the different product categories, what tactics they use to select any product and which product category is shelf space dependent for them. 12 different product categories were selected for this research and different questions were asked about these product categories.

ICA Alidhem store was selected for this research because the consumer’s decision making process could be vary in between the stores. Bigger stores can provide the bigger display to their products and they can provide the more comfortable walking space to their shoppers (consumers) to select the products. So in order to control all these variation in our research we defined one store (ICA Alidhem store). Sample of 96 people were collected on the base of convince and questionnaire were supplied to those buildings which were near to ICA Alidhem store. Further these questionnaire were analyzed through SPSS to find out that which product category among these 12 needs the more premier space. This study is equally important for the manufacturers and retailers as well.

5.8.1 Retailer’s point of view

We cannot ignore the importance of this study from the retailer point of view. At least this study will help the retailer to figure out these 12 product categories. This priority set will help the retailers to define the Planogram for these 12 product categories. If out of these 12 product categories toilet paper needs a premier shelf space then retailers should have to provide the premier shelf space to toilet paper and if facial tissue is last in the priority list then retailer should have to manage it accordingly. This study will not only help the retailers to know the importance of the shelf space even it will help the retailers to know the other factors which are also very important for the sale of product categories. Suppose if any product category is dependent on the sale promotion then he should have to arrange the in store sale promotion for that product category to increase the sale. Retailers can make the sale promotion in many
ways e.g. they can offer the 50% off scheme or they can make it like buy two and get three. Once if the retailer knows that this product category is dependent on the sale promotion then he can tailor many promotions for that product category.

5.8.2 Manufacturer point of view

These findings are as useful for manufacturers as for retailers. Manufacturer actually design and develop the product for the consumers. They usually pay the high amount, to the retailers, to get the premier shelf space in the grocery store in order to get the more consumers attention. This research could be very much helpful for them if they are not getting the return of what they are paying. Suppose if they are not getting the actual return of the product after placing it on premier shelf space which they are expecting then priority set will help them to find out the answer. May be the premier shelf space is not important for the sale of their product category, they are suppose to think about the other factors. If people are rating the price high for their product category than the shelf space then definitely they should have to think about the price first before thinking to purchase the shelf space. Because in that case good price mix will be more help for the manufacturer as compare with premier shelf space. Similarly if their product category is based on the taste then taste will helpful for them to increase the sale as compare with the premier shelf space.

This is for what we defined the priority set (from most important factor to least important factor) within the product category so manufacturer can also know that what is most important for their product category and what is least important for their product category.

There is no doubt that if we place a product, with up to the mark features, on premier shelf space will definitely increase the sale and business for both manufacturer and retailers. Otherwise it could be wastage of money for manufacturer and resources for the retailers as well.

5.9 Implications

Through this research, we find out the buying pattern of consumers and know that how consumer rates these seven factors during the grocery shopping. This research is showing the clear of picture of consumer’s priority about these 12 product categories. This research could be helpful for the manufacturers of these 12 product categories to know the important factors of their product through consumer perspective.

This research could also be helpful for the ICA Alidhem management. They can develop the effective planogram especially for these 12 product categories and can increase the sale of these products. On the base of this research, they can also conduct survey about the other product categories to know the importance of shelf space and other factors for them.

Store location, store area and type of competition could also affect the consumer decision making process for grocery products. This research could also be help for those grocery stores who have the same structure like ICA Alidhem store.
5.10 Limitation

The result of this research is limited to 96 people which were selected on the bases of convince. Different nationality holder filled our questionnaire and 90% of our respondents were student and they were not working.

We may have the different results if we just change these 96 people with other 96 people from the same population. There is also some variation due to the different nationality because people from different countries rate the different things in different way.

Due to the time limitation this research was restricted to one store (ICA Alidhem store), different stores may have the different result against these 12 product categories. And also it was restricted to only 12 product categories and the presented priority set is only for these 12 products which are described in the research.

5.11 Further Research Area

Researchers are recommended to focus on the demographics, to find out the importance of shelf space for different gender and how shelf space can effect the people from different occupation, social classes.
Reference:


Bryman, Alan & Bell, Emma, Business research methods, Oxford University Press 2007


**Web References**

[www.wikipedia.org/quantitative_research.com](http://www.wikipedia.org/quantitative_research.com)
[www.tardis.ed.ac.uk/~kate/qmcweb/s8.htm](http://www.tardis.ed.ac.uk/~kate/qmcweb/s8.htm)
[http://www.icaalidhem.se](http://www.icaalidhem.se)
[http://www.socialresearchmethods.net/tutorial/Mugo/tutorial.htm](http://www.socialresearchmethods.net/tutorial/Mugo/tutorial.htm)
Appendix

Toothpaste

Frequencies

<table>
<thead>
<tr>
<th></th>
<th>Price for tooth paste</th>
<th>Suggestion for toothpaste purchase</th>
<th>Purchase the familiar toothpaste brand</th>
<th>Toothpaste which stands out on shelf</th>
<th>Depends upon the taste of toothpaste</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>2,3750</td>
<td>2,7917</td>
<td>2,4583</td>
<td>2,9063</td>
<td>2,7708</td>
</tr>
</tbody>
</table>

Statistics

<table>
<thead>
<tr>
<th></th>
<th>regular brand of toothpaste</th>
<th>toothpaste brand on sale</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>2,3542</td>
<td>2,4063</td>
</tr>
</tbody>
</table>

Toilet paper

Frequencies

<table>
<thead>
<tr>
<th></th>
<th>Price for toilet paper</th>
<th>Recommendation for toilet paper</th>
<th>buy the most familiar brand of toilet paper</th>
<th>Toilet paper which are on the front of shelf</th>
<th>Toilet paper which are good in performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mean</td>
<td>1,6702</td>
<td>2,8617</td>
<td>2,9468</td>
<td>2,6596</td>
<td>2,6915</td>
</tr>
</tbody>
</table>

Statistics

<table>
<thead>
<tr>
<th></th>
<th>toilet paper which is regular buy</th>
<th>toilet paper which are on sale</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>94</td>
<td>94</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mean</td>
<td>2,4043</td>
<td>2,3085</td>
</tr>
</tbody>
</table>
### Loaf Bread

**Frequencies**

<table>
<thead>
<tr>
<th></th>
<th>Price of loaf bread</th>
<th>Recommendation of other people</th>
<th>familiar loaf bread</th>
<th>loaf bread on prominent shelf space</th>
<th>loaf bread on taste</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
</tr>
<tr>
<td>N Missing</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mean</td>
<td>2,0532</td>
<td>2,6809</td>
<td>2,5213</td>
<td>3,0000</td>
<td>2,0532</td>
</tr>
</tbody>
</table>

**Count**

<table>
<thead>
<tr>
<th></th>
<th>bread which i regular purchase</th>
<th>bread which is on sale</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>94</td>
<td>94</td>
</tr>
<tr>
<td>N Missing</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mean</td>
<td>2,4787</td>
<td>2,6489</td>
</tr>
</tbody>
</table>

### Laundry Detergents

**Frequencies**

<table>
<thead>
<tr>
<th></th>
<th>price for laundry detergents</th>
<th>recommendation for laundry detergents</th>
<th>familiar brand of laundry detergents</th>
<th>laundry brands with premier shelf space</th>
<th>depends upon detergent's performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td>N Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>1,8229</td>
<td>2,4479</td>
<td>2,7292</td>
<td>2,8229</td>
<td>2,6146</td>
</tr>
</tbody>
</table>

**Statistics**

<table>
<thead>
<tr>
<th></th>
<th>buy the regular brand of LD</th>
<th>laundry detergents on sale</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td>N Missing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>2,4479</td>
<td>2,6979</td>
</tr>
</tbody>
</table>
## Facial Tissues

### Frequencies

<table>
<thead>
<tr>
<th></th>
<th>price for facial tissue</th>
<th>recommendations to purchase facial tissues</th>
<th>purchase the familiar brand of facial tissue</th>
<th>facial tissue on prominent shelf space</th>
<th>buy facial tissue on performance base</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>2,0521</td>
<td>2,6458</td>
<td>3,0625</td>
<td>3,198</td>
<td>2,6458</td>
</tr>
</tbody>
</table>

### Statistics

<table>
<thead>
<tr>
<th></th>
<th>buy the brand which I regular buy</th>
<th>buy the brand of facial tissue which is on sale</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>2,2396</td>
<td>2,3750</td>
</tr>
</tbody>
</table>

## Cookies

### Frequencies

<table>
<thead>
<tr>
<th></th>
<th>price of cookies</th>
<th>recommendation of other people</th>
<th>familiar brand of cookies</th>
<th>cookies which stands out on the shelf space</th>
<th>cookies on the base of taste</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mean</td>
<td>2,1383</td>
<td>2,3404</td>
<td>2,7447</td>
<td>2,7979</td>
<td>2,0851</td>
</tr>
</tbody>
</table>

### Statistics

<table>
<thead>
<tr>
<th></th>
<th>cookies which I regular buy</th>
<th>cookies which are on sale</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>94</td>
<td>94</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mean</td>
<td>2,6915</td>
<td>2,7340</td>
</tr>
</tbody>
</table>
## COFFEE

### Frequencies

### Statistics

<table>
<thead>
<tr>
<th></th>
<th>price for coffee</th>
<th>recommendation for coffee purchase</th>
<th>Most familiar brand of coffee</th>
<th>coffee on prominent shelf space</th>
<th>taste of coffee</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mean</td>
<td>2.0851</td>
<td>2.3298</td>
<td>2.5319</td>
<td>2.9681</td>
<td>2.0957</td>
</tr>
</tbody>
</table>

### CHIPS

### Frequencies

### Statistics

<table>
<thead>
<tr>
<th></th>
<th>price for chips</th>
<th>recommendation of other people</th>
<th>most familiar brand of chips</th>
<th>chips which comes first on shelf space</th>
<th>chips which has good taste</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mean</td>
<td>2.4362</td>
<td>2.5426</td>
<td>2.6064</td>
<td>2.8298</td>
<td>2.0700</td>
</tr>
</tbody>
</table>

### CAKE MIX

### Frequencies

### Statistics

<table>
<thead>
<tr>
<th></th>
<th>price for cake mix</th>
<th>recommendation of other people</th>
<th>purchase the familiar brand of cake mix</th>
<th>cake mix on prominent shelf space</th>
<th>cake mix with good taste</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mean</td>
<td>1.6915</td>
<td>2.1702</td>
<td>2.5319</td>
<td>2.9804</td>
<td>2.2970</td>
</tr>
</tbody>
</table>

### Statistics

<table>
<thead>
<tr>
<th></th>
<th>cake mix which i always purchase</th>
<th>cake mix which is on sale</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>94</td>
<td>94</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mean</td>
<td>2.6170</td>
<td>2.6277</td>
</tr>
</tbody>
</table>
**Butter**

**Frequencies**

<table>
<thead>
<tr>
<th></th>
<th>price for butter</th>
<th>recommendation to purchase</th>
<th>familiar brand of butter</th>
<th>butter stands out on shelf space</th>
<th>butter which has good taste</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mean</td>
<td>2.0638</td>
<td>2.5426</td>
<td>2.5319</td>
<td>2.7979</td>
<td>2.0319</td>
</tr>
</tbody>
</table>

**Statistics**

<table>
<thead>
<tr>
<th></th>
<th>butter which I regularly buy</th>
<th>butter which is on sale</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>94</td>
<td>94</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Mean</td>
<td>2.5553</td>
<td>2.8085</td>
</tr>
</tbody>
</table>

**Breakfast Cereals**

**Frequencies**

<table>
<thead>
<tr>
<th></th>
<th>Price for breakfast cereals</th>
<th>recommendation for breakfast cereals</th>
<th>buy the familiar breakfast cereals brand</th>
<th>importance of shelf space for breakfast cereals</th>
<th>purchase on the base of taste</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>2.3542</td>
<td>2.9063</td>
<td>2.6771</td>
<td>3.0833</td>
<td>2.4167</td>
</tr>
</tbody>
</table>

**Statistics**

<table>
<thead>
<tr>
<th></th>
<th>buy the breakfast cereals which I always buy</th>
<th>breakfast cereals which are on sale</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>2.2083</td>
<td>2.7604</td>
</tr>
</tbody>
</table>

**Beer**

**Frequencies**

<table>
<thead>
<tr>
<th></th>
<th>price for beer</th>
<th>Recommendation of the people</th>
<th>buy the familiar brand of beer</th>
<th>beer on prominent shelf space</th>
<th>buy the beer on the base of taste</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>2.0729</td>
<td>2.3854</td>
<td>2.4583</td>
<td>2.7813</td>
<td>2.5000</td>
</tr>
</tbody>
</table>

**Statistics**

<table>
<thead>
<tr>
<th></th>
<th>beer which I regularly buy</th>
<th>beer which is on sale</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>96</td>
<td>96</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>2.3125</td>
<td>2.8021</td>
</tr>
</tbody>
</table>
### Number of visits in a month

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>once in a month</td>
<td>6</td>
<td>6.3</td>
<td>6.3</td>
<td>6.3</td>
</tr>
<tr>
<td>twice in a month</td>
<td>20</td>
<td>20.8</td>
<td>20.8</td>
<td>27.1</td>
</tr>
<tr>
<td>more than two times</td>
<td>70</td>
<td>72.9</td>
<td>72.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>96</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

### Spending in a month

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>less than 2000</td>
<td>66</td>
<td>68.8</td>
<td>68.8</td>
<td>68.8</td>
</tr>
<tr>
<td>2001 to 4000</td>
<td>25</td>
<td>26.0</td>
<td>26.0</td>
<td>94.8</td>
</tr>
<tr>
<td>4001 to 6000</td>
<td>5</td>
<td>5.2</td>
<td>5.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>96</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

### Shopping List

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>every time</td>
<td>16</td>
<td>16.7</td>
<td>16.7</td>
<td>16.7</td>
</tr>
<tr>
<td>Most of the time</td>
<td>54</td>
<td>56.3</td>
<td>56.3</td>
<td>72.9</td>
</tr>
<tr>
<td>Never</td>
<td>26</td>
<td>27.1</td>
<td>27.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>96</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>
## Cross Tabs

### Shopping list * importance of shelf space for breakfast cereals

<table>
<thead>
<tr>
<th>Importance of shelf space for breakfast cereals</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shopping list</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>every time</td>
<td>0</td>
<td>4</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Most of the time</td>
<td>2</td>
<td>16</td>
<td>22</td>
<td>6</td>
</tr>
<tr>
<td>Never</td>
<td>2</td>
<td>9</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4</strong></td>
<td><strong>29</strong></td>
<td><strong>34</strong></td>
<td><strong>1</strong></td>
</tr>
</tbody>
</table>

### Shopping list * importance of shelf space for breakfast cereals

Crosstabulation

<table>
<thead>
<tr>
<th>Importance of shelf space for breakfast cereals</th>
<th>Strongly disagree</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shopping list</td>
<td></td>
<td></td>
</tr>
<tr>
<td>every time</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Most of the time</td>
<td>6</td>
<td>52</td>
</tr>
<tr>
<td>Never</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
<td><strong>96</strong></td>
</tr>
</tbody>
</table>

### Shopping list * toothpaste which stands out on shelf

Crosstabulation

<table>
<thead>
<tr>
<th>Toothpaste which stands out on shelf</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shopping list</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>every time</td>
<td>2</td>
<td>9</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Most of the time</td>
<td>2</td>
<td>14</td>
<td>22</td>
<td>8</td>
</tr>
<tr>
<td>Never</td>
<td>2</td>
<td>4</td>
<td>18</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
<td><strong>27</strong></td>
<td><strong>45</strong></td>
<td><strong>10</strong></td>
</tr>
</tbody>
</table>

### Shopping list * toothpaste which stands out on shelf

Crosstabulation

<table>
<thead>
<tr>
<th>Toothpaste which stands out on shelf</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shopping list</td>
<td></td>
</tr>
<tr>
<td>every time</td>
<td>16</td>
</tr>
<tr>
<td>Most of the time</td>
<td>52</td>
</tr>
<tr>
<td>Never</td>
<td>28</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>96</strong></td>
</tr>
</tbody>
</table>

### Shopping list * laundry brands with premier shelf space

Crosstabulation

<table>
<thead>
<tr>
<th>Laundry brands with premier shelf space</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shopping list</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>every time</td>
<td>4</td>
<td>0</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Most of the time</td>
<td>3</td>
<td>21</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>Never</td>
<td>5</td>
<td>4</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
<td><strong>25</strong></td>
<td><strong>37</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>
### Shopping list * laundry brands with premier shelf space Crosstabulation

<table>
<thead>
<tr>
<th></th>
<th>laundry brands with premier shelf space</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shopping list</td>
<td></td>
<td></td>
</tr>
<tr>
<td>every time</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>Most of the time</td>
<td>4</td>
<td>52</td>
</tr>
<tr>
<td>Never</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>96</td>
</tr>
</tbody>
</table>

### Shopping list * facial tissue on prominent shelf space Crosstabulation

<table>
<thead>
<tr>
<th></th>
<th>facial tissue on prominent shelf space</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>agree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>neutral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shopping list</td>
<td></td>
<td></td>
</tr>
<tr>
<td>every time</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Most of the time</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Never</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>30</td>
</tr>
</tbody>
</table>

### Shopping list * loaf bread on prominent shelf space Crosstabulation

<table>
<thead>
<tr>
<th></th>
<th>loaf bread on prominent shelf space</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>agree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>neutral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shopping list</td>
<td></td>
<td></td>
</tr>
<tr>
<td>every time</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Most of the time</td>
<td>3</td>
<td>28</td>
</tr>
<tr>
<td>Never</td>
<td>0</td>
<td>46</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>62</td>
</tr>
</tbody>
</table>

### Shopping list * coffee on prominent shelf space Crosstabulation

<table>
<thead>
<tr>
<th></th>
<th>coffee on prominent shelf space</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>agree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>neutral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shopping list</td>
<td></td>
<td></td>
</tr>
<tr>
<td>every time</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Most of the time</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Never</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>18</td>
</tr>
</tbody>
</table>
### Shopping list * coffee on prominent shelf space

**Crosstabulation**

<table>
<thead>
<tr>
<th></th>
<th>coffee on prominent shelf space</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>Shopping list</td>
<td>every time</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Most of the time</td>
<td>7</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Never</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>9</td>
<td>96</td>
</tr>
</tbody>
</table>

### Shopping list * chips which comes first on shelf space

**Crosstabulation**

<table>
<thead>
<tr>
<th></th>
<th>chips which comes first on shelf space</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
<td>agree</td>
</tr>
<tr>
<td>Shopping list</td>
<td>every time</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Most of the time</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Never</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>

### Shopping list * chips which comes first on shelf space

**Crosstabulation**

<table>
<thead>
<tr>
<th></th>
<th>chips which comes first on shelf space</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td>Total</td>
</tr>
<tr>
<td>Shopping list</td>
<td>every time</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Most of the time</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Never</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

### Shopping list * toilet paper which are on the front of shelf

**Crosstabulation**

<table>
<thead>
<tr>
<th></th>
<th>toilet paper which are on the front of shelf</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
<td>agree</td>
</tr>
<tr>
<td>Shopping list</td>
<td>every time</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Most of the time</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Never</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>
### Shopping list * toilet paper which are on the front of shelf Crosstabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>toilet paper which are on the front of shelf</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td></td>
</tr>
<tr>
<td>Shopping list</td>
<td></td>
<td></td>
</tr>
<tr>
<td>every time</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>Most of the time</td>
<td>2</td>
<td>52</td>
</tr>
<tr>
<td>Never</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>96</td>
</tr>
</tbody>
</table>

### Shopping list * butter stands out on shelf space Crosstabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>butter stands out on shelf space</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
<td>agree</td>
</tr>
<tr>
<td>Shopping list</td>
<td></td>
<td></td>
</tr>
<tr>
<td>every time</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Most of the time</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Never</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>32</td>
</tr>
</tbody>
</table>

### Shopping list * butter stands out on shelf space Crosstabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>butter stands out on shelf space</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td>Total</td>
</tr>
<tr>
<td>Shopping list</td>
<td></td>
<td></td>
</tr>
<tr>
<td>every time</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>Most of the time</td>
<td>4</td>
<td>52</td>
</tr>
<tr>
<td>Never</td>
<td>3</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>96</td>
</tr>
</tbody>
</table>

### Shopping list * cake mix on prominent shelf space Crosstabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>cake mix on prominent shelf space</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
<td>agree</td>
</tr>
<tr>
<td>Shopping list</td>
<td></td>
<td></td>
</tr>
<tr>
<td>every time</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Most of the time</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>Never</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>22</td>
</tr>
</tbody>
</table>

### Shopping list * cake mix on prominent shelf space Crosstabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>cake mix on prominent shelf space</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td>Total</td>
</tr>
<tr>
<td>Shopping list</td>
<td></td>
<td></td>
</tr>
<tr>
<td>every time</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>Most of the time</td>
<td>2</td>
<td>52</td>
</tr>
<tr>
<td>Never</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>96</td>
</tr>
</tbody>
</table>
### Shopping list * cookies which stands out on the shelf space Crosstabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>cookies which stands out on the shelf space</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
<td>agree</td>
<td>neutral</td>
<td>Disagree</td>
</tr>
<tr>
<td>Shopping list</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>every time</td>
<td>0</td>
<td>6</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Most of the time</td>
<td>3</td>
<td>18</td>
<td>23</td>
<td>6</td>
</tr>
<tr>
<td>Never</td>
<td>0</td>
<td>7</td>
<td>18</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>31</td>
<td>46</td>
<td>14</td>
</tr>
</tbody>
</table>

### Shopping list * cookies which stands out on the shelf space Crosstabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>cookies which stands out on the shelf space</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td>16</td>
</tr>
<tr>
<td>Shopping list</td>
<td></td>
<td></td>
</tr>
<tr>
<td>every time</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>Most of the time</td>
<td>2</td>
<td>52</td>
</tr>
<tr>
<td>Never</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>66</td>
</tr>
</tbody>
</table>

### Crosstabs

#### Number of visit in a month * importance of shelf space for breakfast cereals Cross tabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>importance of shelf space for breakfast cereals</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
<td>agree</td>
<td>neutral</td>
<td>Disagree</td>
</tr>
<tr>
<td>Number of visit in a month</td>
<td>once in a month</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>twice in a month</td>
<td>0</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>more than two times</td>
<td>4</td>
<td>14</td>
<td>26</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>29</td>
<td>34</td>
<td>19</td>
</tr>
</tbody>
</table>

#### Number of visit in a month * importance of shelf space for breakfast cereals Cross tabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>importance of shelf space for breakfast cereals</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td>10</td>
</tr>
<tr>
<td>Number of visit in a month</td>
<td>once in a month</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>twice in a month</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>more than two times</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>96</td>
</tr>
</tbody>
</table>

#### Number of visit in a month * toothpaste which stands out on shelf Cross tabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>toothpaste which stands out on shelf</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
<td>agree</td>
<td>neutral</td>
<td>Disagree</td>
</tr>
<tr>
<td>Number of visit in a month</td>
<td>once in a month</td>
<td>0</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>twice in a month</td>
<td>0</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>more than two times</td>
<td>6</td>
<td>17</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>27</td>
<td>45</td>
<td>10</td>
</tr>
</tbody>
</table>
Number of visit in a month * toothpaste which stands out on shelf Cross tabulation

<table>
<thead>
<tr>
<th>Number of visit in a month</th>
<th>toothpaste which stands out on shelf</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td></td>
</tr>
<tr>
<td>once in a month</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>twice in a month</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>more than two times</td>
<td>6</td>
<td>70</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>96</td>
</tr>
</tbody>
</table>

Number of visit in a month * laundry brands with premier shelf space Cross tabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>laundry brands with premier shelf space</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
</tr>
<tr>
<td>Number of visit in a month</td>
<td></td>
</tr>
<tr>
<td>once in a month</td>
<td>0</td>
</tr>
<tr>
<td>twice in a month</td>
<td>2</td>
</tr>
<tr>
<td>more than two times</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
</tr>
</tbody>
</table>

Number of visit in a month * laundry brands with premier shelf space Cross tabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>laundry brands with premier shelf space</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td></td>
</tr>
<tr>
<td>once in a month</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>twice in a month</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>more than two times</td>
<td>4</td>
<td>70</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>96</td>
</tr>
</tbody>
</table>

Number of visit in a month * facial tissue on prominent shelf space Cross tabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>facial tissue on prominent shelf space</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
</tr>
<tr>
<td>Number of visit in a month</td>
<td></td>
</tr>
<tr>
<td>once in a month</td>
<td>0</td>
</tr>
<tr>
<td>twice in a month</td>
<td>2</td>
</tr>
<tr>
<td>more than two times</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
</tr>
</tbody>
</table>

Number of visit in a month * facial tissue on prominent shelf space Cross tabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>facial tissue on prominent shelf space</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td></td>
</tr>
<tr>
<td>once in a month</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>twice in a month</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>more than two times</td>
<td>14</td>
<td>70</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>96</td>
</tr>
</tbody>
</table>
### Number of visit in a month * beer on prominent shelf space Cross tabulation

<table>
<thead>
<tr>
<th>Number of visit in a month</th>
<th>Strongly agree</th>
<th>agree</th>
<th>neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>once in a month</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>twice in a month</td>
<td>0</td>
<td>7</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>more than two times</td>
<td>4</td>
<td>25</td>
<td>26</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>36</td>
<td>31</td>
<td>21</td>
</tr>
</tbody>
</table>

### Number of visit in a month * loaf bread on prominent shelf space Cross tabulation

<table>
<thead>
<tr>
<th>Number of visit in a month</th>
<th>Strongly agree</th>
<th>agree</th>
<th>neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>once in a month</td>
<td>0</td>
<td>6</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>twice in a month</td>
<td>2</td>
<td>8</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>more than two times</td>
<td>0</td>
<td>23</td>
<td>27</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>31</td>
<td>39</td>
<td>13</td>
</tr>
</tbody>
</table>

### Number of visit in a month * coffee on prominent shelf space Cross tabulation

<table>
<thead>
<tr>
<th>Number of visit in a month</th>
<th>Strongly agree</th>
<th>agree</th>
<th>neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>once in a month</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>twice in a month</td>
<td>8</td>
<td>2</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>more than two times</td>
<td>6</td>
<td>14</td>
<td>21</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>18</td>
<td>30</td>
<td>25</td>
</tr>
</tbody>
</table>
### Number of visit in a month * coffee on prominent shelf space Cross tabulation

<table>
<thead>
<tr>
<th>Number of visit in a month</th>
<th>coffee on prominent shelf space</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td>agree</td>
</tr>
<tr>
<td>once in a month</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>twice in a month</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>more than two times</td>
<td>7</td>
<td>70</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>9</td>
<td>96</td>
</tr>
</tbody>
</table>

### Number of visit in a month * chips which comes first on shelf space Cross tabulation

<table>
<thead>
<tr>
<th>Number of visit in a month</th>
<th>chips which comes first on shelf space</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
<td>agree</td>
</tr>
<tr>
<td>once in a month</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>twice in a month</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>more than two times</td>
<td>5</td>
<td>23</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7</td>
<td>31</td>
</tr>
</tbody>
</table>

### Number of visit in a month * toilet paper which are on the front of shelf Cross tabulation

<table>
<thead>
<tr>
<th>Number of visit in a month</th>
<th>toilet paper which are on the front of shelf</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
<td>agree</td>
</tr>
<tr>
<td>once in a month</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>twice in a month</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>more than two times</td>
<td>10</td>
<td>19</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15</td>
<td>31</td>
</tr>
</tbody>
</table>

### Number of visit in a month * toilet paper which are on the front of shelf Cross tabulation

<table>
<thead>
<tr>
<th>Number of visit in a month</th>
<th>toilet paper which are on the front of shelf</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td>agree</td>
</tr>
<tr>
<td>once in a month</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>twice in a month</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>more than two times</td>
<td>4</td>
<td>70</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>6</td>
<td>96</td>
</tr>
</tbody>
</table>
## Number of visit in a month vs butter stands out on shelf space Cross tabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>butter stands out on shelf space</th>
<th>Strongly agree</th>
<th>agree</th>
<th>neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of visit in a month</td>
<td>once in a month</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>twice in a month</td>
<td>1</td>
<td>9</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>more than two times</td>
<td>8</td>
<td>21</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>9</td>
<td>32</td>
<td>31</td>
<td>15</td>
</tr>
</tbody>
</table>

## Number of visit in a month vs cake mix on prominent shelf space Cross tabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>cake mix on prominent shelf space</th>
<th>Strongly agree</th>
<th>agree</th>
<th>neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of visit in a month</td>
<td>once in a month</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>twice in a month</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>more than two times</td>
<td>5</td>
<td>15</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>8</td>
<td>22</td>
<td>29</td>
<td>35</td>
</tr>
</tbody>
</table>

## Number of visit in a month vs cookies which stands out on the shelf space Cross tabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>cookies which stands out on the shelf space</th>
<th>Strongly agree</th>
<th>agree</th>
<th>neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of visit in a month</td>
<td>once in a month</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>twice in a month</td>
<td>0</td>
<td>10</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>more than two times</td>
<td>3</td>
<td>31</td>
<td>46</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>3</td>
<td>41</td>
<td>46</td>
<td>14</td>
</tr>
</tbody>
</table>
### Number of visit in a month * cookies which stands out on the shelf space Cross tabulation

<table>
<thead>
<tr>
<th></th>
<th>cookies which stands out on the shelf space</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td></td>
</tr>
<tr>
<td>Number of visit in a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>once in a month</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>twice in a month</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>more than two times</td>
<td>0</td>
<td>70</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>96</td>
</tr>
</tbody>
</table>

### Spending in a month * importance of shelf space for breakfast cereals Crosstabulation

<table>
<thead>
<tr>
<th>Spending in a month</th>
<th>importance of shelf space for breakfast cereals</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
<td>agree</td>
</tr>
<tr>
<td>less than 2000</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>2001 to 4000</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>4001 to 6000</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>29</td>
</tr>
</tbody>
</table>

### Spending in a month * importance of shelf space for breakfast cereals Crosstabulation

<table>
<thead>
<tr>
<th>Spending in a month</th>
<th>importance of shelf space for breakfast cereals</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td></td>
</tr>
<tr>
<td>less than 2000</td>
<td>4</td>
<td>67</td>
</tr>
<tr>
<td>2001 to 4000</td>
<td>2</td>
<td>24</td>
</tr>
<tr>
<td>4001 to 6000</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>96</td>
</tr>
</tbody>
</table>

### Spending in a month * toothpaste which stands out on shelf Crosstabulation

<table>
<thead>
<tr>
<th>Spending in a month</th>
<th>toothpaste which stands out on shelf</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
<td>agree</td>
</tr>
<tr>
<td>less than 2000</td>
<td>1</td>
<td>19</td>
</tr>
<tr>
<td>2001 to 4000</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>4001 to 6000</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
<td>27</td>
</tr>
</tbody>
</table>

### Spending in a month * toothpaste which stands out on shelf Crosstabulation

<table>
<thead>
<tr>
<th>Spending in a month</th>
<th>toothpaste which stands out on shelf</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td></td>
</tr>
<tr>
<td>less than 2000</td>
<td>6</td>
<td>67</td>
</tr>
<tr>
<td>2001 to 4000</td>
<td>2</td>
<td>24</td>
</tr>
<tr>
<td>4001 to 6000</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>8</td>
<td>96</td>
</tr>
</tbody>
</table>
### Spending in a month * laundry brands with premier shelf space Crosstabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>laundry brands with premier shelf space</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
</tr>
<tr>
<td>Spending in a month</td>
<td>less than 2000</td>
</tr>
<tr>
<td></td>
<td>2001 to 4000</td>
</tr>
<tr>
<td></td>
<td>4001 to 6000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
</tbody>
</table>

### Spending in a month * laundry brands with premier shelf space Crosstabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>laundry brands with premier shelf space</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>Spending in a month</td>
<td>strongly disagree</td>
</tr>
<tr>
<td>less than 2000</td>
<td>2</td>
</tr>
<tr>
<td>2001 to 4000</td>
<td>2</td>
</tr>
<tr>
<td>4001 to 6000</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>6</td>
</tr>
</tbody>
</table>

### Spending in a month * facial tissue on prominent shelf space Crosstabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>facial tissue on prominent shelf space</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
</tr>
<tr>
<td>Spending in a month</td>
<td>less than 2000</td>
</tr>
<tr>
<td></td>
<td>2001 to 4000</td>
</tr>
<tr>
<td></td>
<td>4001 to 6000</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
</tr>
</tbody>
</table>

### Spending in a month * facial tissue on prominent shelf space Crosstabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>facial tissue on prominent shelf space</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>Spending in a month</td>
<td>strongly disagree</td>
</tr>
<tr>
<td>less than 2000</td>
<td>10</td>
</tr>
<tr>
<td>2001 to 4000</td>
<td>4</td>
</tr>
<tr>
<td>4001 to 6000</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
</tr>
</tbody>
</table>

### Spending in a month * beer on prominent shelf space Crosstabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>beer on prominent shelf space</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
</tr>
<tr>
<td>Spending in a month</td>
<td>less than 2000</td>
</tr>
<tr>
<td></td>
<td>2001 to 4000</td>
</tr>
<tr>
<td></td>
<td>4001 to 6000</td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
</tr>
</tbody>
</table>
### Spending in a month * beer on prominent shelf space Crosstabulation

<table>
<thead>
<tr>
<th>Spending in a month</th>
<th>beer on prominent shelf space</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td></td>
</tr>
<tr>
<td>less than 2000</td>
<td>0</td>
<td>67</td>
</tr>
<tr>
<td>2001 to 4000</td>
<td>2</td>
<td>24</td>
</tr>
<tr>
<td>4001 to 6000</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
<td>96</td>
</tr>
</tbody>
</table>

### Spending in a month * loaf bread on prominent shelf space Crosstabulation

<table>
<thead>
<tr>
<th>Spending in a month</th>
<th>loaf bread on prominent shelf space</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
</tr>
<tr>
<td>less than 2000</td>
<td>1</td>
</tr>
<tr>
<td>2001 to 4000</td>
<td>1</td>
</tr>
<tr>
<td>4001 to 6000</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>2</td>
</tr>
</tbody>
</table>

### Spending in a month * coffee on prominent shelf space Crosstabulation

<table>
<thead>
<tr>
<th>Spending in a month</th>
<th>coffee on prominent shelf space</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
</tr>
<tr>
<td>less than 2000</td>
<td>8</td>
</tr>
<tr>
<td>2001 to 4000</td>
<td>4</td>
</tr>
<tr>
<td>4001 to 6000</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
</tr>
</tbody>
</table>

### Spending in a month * chips which comes first on shelf space Crosstabulation

<table>
<thead>
<tr>
<th>Spending in a month</th>
<th>chips which comes first on shelf space</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
</tr>
<tr>
<td>less than 2000</td>
<td>6</td>
</tr>
<tr>
<td>2001 to 4000</td>
<td>1</td>
</tr>
<tr>
<td>4001 to 6000</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>7</td>
</tr>
</tbody>
</table>
## Spending in a month * chips which comes first on shelf space Crosstabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>chips which comes first on shelf space</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td></td>
</tr>
<tr>
<td>Spending in a month</td>
<td>less than 2000</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>2001 to 4000</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4001 to 6000</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>5</td>
</tr>
</tbody>
</table>

## Spending in a month * toilet paper which are on the front of shelf Crosstabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>toilet paper which are on the front of shelf</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
<td>agree</td>
</tr>
<tr>
<td>Spending in a month</td>
<td>less than 2000</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>2001 to 4000</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>4001 to 6000</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

## Spending in a month * butter stands out on shelf space Crosstabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>butter stands out on shelf space</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
<td>agree</td>
</tr>
<tr>
<td>Spending in a month</td>
<td>less than 2000</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>2001 to 4000</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>4001 to 6000</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>9</td>
</tr>
</tbody>
</table>

## Spending in a month * cake mix on prominent shelf space Crosstabulation

<table>
<thead>
<tr>
<th>Count</th>
<th>cake mix on prominent shelf space</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
<td>agree</td>
</tr>
<tr>
<td>Spending in a month</td>
<td>less than 2000</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>2001 to 4000</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>4001 to 6000</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>
### Spending in a month * cake mix on prominent shelf space Crosstabulation

<table>
<thead>
<tr>
<th>Spending in a month</th>
<th>cake mix on prominent shelf space</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td>2</td>
</tr>
<tr>
<td>less than 2000</td>
<td>2</td>
<td>67</td>
</tr>
<tr>
<td>2001 to 4000</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>4001 to 6000</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2</td>
<td>96</td>
</tr>
</tbody>
</table>

### Spending in a month * cookies which stands out on the shelf space Crosstabulation

<table>
<thead>
<tr>
<th>Spending in a month</th>
<th>cookies which stands out on the shelf space</th>
<th>Strongly agree</th>
<th>agree</th>
<th>neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 2000</td>
<td>3</td>
<td>21</td>
<td>32</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>2001 to 4000</td>
<td>0</td>
<td>7</td>
<td>14</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4001 to 6000</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>3</td>
<td>31</td>
<td>46</td>
<td>14</td>
<td></td>
</tr>
</tbody>
</table>

### Spending in a month * cookies which stands out on the shelf space Crosstabulation

<table>
<thead>
<tr>
<th>Spending in a month</th>
<th>cookies which stands out on the shelf space</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strongly disagree</td>
<td>2</td>
</tr>
<tr>
<td>less than 2000</td>
<td>2</td>
<td>67</td>
</tr>
<tr>
<td>2001 to 4000</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>4001 to 6000</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2</td>
<td>96</td>
</tr>
</tbody>
</table>
Questionnaire

We are the student of Umea University and want to know about your shopping experience of ICA Alidhem Store. Listed below are several familiar grocery product categories. For each product category, we would like to know how you decide what product to buy. We do NOT want to know the name of the product, just the way you go about selecting among the product categories.

I usually visit the grocery store

___ Once a month      ___ Twice a month      ___ More than two times in a month.

Approximately, I spend the ______________ SEK for my monthly grocery shopping.

___ less than 2000     ____ 2001 to 4000       ____4001 to 6000   ____ more then 6000

I make the shopping list before leaving for grocery store.

___ Every time             ___ Most of the time              ___Never

Have you ever purchased from ICA Alidhem Store ___ Yes.      ___No.  (In case of No please STOP here)

Imagine you are in ICA Alidhem Store to purchase Breakfast Cereals, how you will select the product?

| Price of this product is | Very important | | Not Important |
|--------------------------|----------------|-------------------|
| Suggestions of other people are | Very important | | Not important |
| I buy the most familiar product among this product category | Strongly agree | | Strongly disagree |
| I buy the product, which stands out on the shelf | Strongly agree | | Strongly disagree |
| I buy this product on the base of taste | Strongly agree | | Strongly disagree |
| I buy the product, which I always buy | Strongly agree | | Strongly disagree |
| I buy the product, which is on sale | Strongly agree | | Strongly disagree |

Imagine you are in ICA Alidhem Store to purchase Toothpaste, how you will select the product?

| Price of this product is | Very important | | Not Important |
|--------------------------|----------------|-------------------|
| Suggestion of other people are | Very important | | Not Important |
Imagine you are in ICA Alidhem Store to purchase **Laundry Detergent**, how you will select this product?

<table>
<thead>
<tr>
<th>Price of this product is</th>
<th>Very important</th>
<th>Not Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suggestion of other people are</td>
<td>Very important</td>
<td>Not Important</td>
</tr>
<tr>
<td>I buy the most familiar product among this product category</td>
<td>Strongly agree</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>I buy the product, which stands out on the shelf</td>
<td>Strongly agree</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>I buy this product on the base of taste</td>
<td>Strongly agree</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>I buy the product, which I always buy</td>
<td>Strongly agree</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>I buy the product, which is on sale</td>
<td>Strongly agree</td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

Imagine you are in ICA Alidhem Store to purchase **Facial Tissue**, how you will select this product?

<table>
<thead>
<tr>
<th>Price of this product is</th>
<th>Very important</th>
<th>Not Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suggestion of other people are</td>
<td>Very important</td>
<td>Not Important</td>
</tr>
<tr>
<td>I buy the most familiar product among this product category</td>
<td>Strongly agree</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>I buy the product, which stands out on the shelf</td>
<td>Strongly agree</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>I buy this product on performance base</td>
<td>Strongly agree</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>I buy the product, which I always buy</td>
<td>Strongly agree</td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>I buy the product, which is on sale</td>
<td>Strongly agree</td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

Imagine you are in ICA Alidhem Store to purchase **Beer**, how you will select this product?
<table>
<thead>
<tr>
<th></th>
<th>Very important</th>
<th></th>
<th>Not Important</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Price of this product is</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Suggestion of other people are</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>I buy the most familiar product among this product category.</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td><strong>I buy the product which stands out on the shelf</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td><strong>I buy the product on the base of taste</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td><strong>I buy the product, which I always buy</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td><strong>I buy the product, which is on sale</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

Imagine you are in ICA Alidhem Store to purchase **Loaf Bread (limpabröd)**, how you will select this product?

<table>
<thead>
<tr>
<th></th>
<th>Very important</th>
<th></th>
<th>Not Important</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Price of this product is</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Suggestion of other people are</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>I buy the most familiar product among this product category.</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td><strong>I buy the product which stands out on the shelf</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td><strong>I buy this product on the base of taste</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td><strong>I buy the product, which I always buy</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td><strong>I buy the product, which is on sale</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

Imagine you are in ICA Alidhem to purchase **Coffee**, how you will select this product?

<table>
<thead>
<tr>
<th></th>
<th>Very important</th>
<th></th>
<th>Not Important</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Price of this product is</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Suggestion of other people are</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>I buy the most familiar product among this product category.</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td><strong>I buy the product which stands out on the shelf</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td><strong>I buy this product on the base of taste</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td><strong>I buy the product, which I always buy</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td><strong>I buy the product, which is on sale</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

Imagine you are in ICA Alidhem to purchase **Chips**, how you will select this product?
Imagine you are in ICA Alidhem Store to purchase (toalettpapper) **Bathroom Tissue**, how you will select this product?

<table>
<thead>
<tr>
<th></th>
<th>Very important</th>
<th></th>
<th>Not Important</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Price of this product is</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Suggestion of other people are</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>I buy the most familiar product among this product category.</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td><strong>I buy the product which stands out on the shelf</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td><strong>I buy this product on the base of taste</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td><strong>I buy the product, which I always buy</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td><strong>I buy the product, which is on sale</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

Imagine you are in ICA Alidhem Store to purchase **Margarine/Butter**, how you will select this product?

<table>
<thead>
<tr>
<th></th>
<th>Very important</th>
<th></th>
<th>Not Important</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Price of this product is</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Suggestion of other people are</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>I buy the most familiar product among this product category.</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td><strong>I buy the product which stands out on the shelf</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td><strong>I buy this product on performance base</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td><strong>I buy the product, which I always buy</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td><strong>I buy the product, which is on sale</strong></td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>
Imagine you are in ICA Alidhem Store to purchase **Cake Mix**, how you will select this product?

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree</th>
<th></th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I buy the product, which I always buy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I buy the product, which is on sale</td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

Imagine you are in ICA Alidhem Store to purchase **Cookies** (any type), how you will select this product?

<table>
<thead>
<tr>
<th></th>
<th>Very important</th>
<th></th>
<th>Not Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price of this product is</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suggestion of other people are</td>
<td>Very important</td>
<td></td>
<td>Not Important</td>
</tr>
<tr>
<td>I buy the most familiar product among this product category.</td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>I buy the product which stands out on the shelf</td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>I buy this product on the base of taste</td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>I buy the product, which I always buy</td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
<tr>
<td>I buy the product, which is on sale</td>
<td>Strongly agree</td>
<td></td>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>