

# **Potato chips in the Netherlands: An analysis of firm strategy and consumer purchasing behavior**

David Francisty

2010

Bachelor of Commerce Best Business Research Papers

UVic Libraries ePublishing Services

© 2010 Francisty.

Original citation:

Francisty, D. (2010). Potato chips in the Netherlands: An analysis of firm strategy and consumer purchasing behavior. *Bachelor of Commerce Best Business Research Papers, 3*, 19-39.

---

Downloaded from UVicSpace Research & Learning Repository

[dspace.library.uvic.ca](http://dspace.library.uvic.ca)



**University  
of Victoria**

Libraries

# Potato Chips in the Netherlands: An Analysis of Firm Strategy and Consumer Purchasing Behavior

David Francisty  
Spring 2010

## ABSTRACT

Potato chips sales are a multi-million dollar industry in the Netherlands. The purpose of this report is to analyze firm specific strategies and consumer purchasing behaviors in relation to this industry. A fundamental question is assessed throughout the report, while consistently considering the four principles of marketing (Price, Place, Product, and Promotion): How can small start-up producers strengthen their market position against global conglomerates in the Dutch potato chips market? Hoeksche Chips, a local Dutch start-up chips producer, is used as a comparison and a tool for discussion. Primary data collection, from 207 survey respondents, is analyzed and SPSS outputs considered. Results indicate that consumer's purchasing decisions are influenced by their perceived level of product quality. Consumers find taste, flavour selection, and price as the three most important buying factors. They are unwilling to pay a premium for locally produced chips, and do not consider a chips' healthiness as an important purchasing factor. This study concludes with a recommendation that by adapting the four principles of marketing, new start-ups can strengthen their existing strategies and be better positioned to navigate the challenges of business in the Netherlands.

## ACKNOWLEDGMENTS

The completion of this report would not be possible without the close cooperation, and expertise of Maastricht University School of Business and Economics undergraduate students: Anna Orywal, Amir Reza Rezvani, Jeffrey Vulink, Jenny Dreiling, and Patrick Timmers. Their support and statistical capabilities, primarily with SPSS, were paramount to the success of my analysis. I would like to personally thank them for their contributions and continued support throughout the entire duration of this analysis.

## INTRODUCTION

Potato chips are a snack food favourite of all generations. The first potato chip recipe was created by, American born, George Crum in August, 1853. His idea was to create a new side dish, using thinly sliced potato wedges, for his family's restaurant in New York. Crum used a multi stir-frying method to crisp up the potato slices, and served them to customers as an alternative to French fries. His new potato concoctions were a tremendous success, receiving raving reviews and increased demand.

After almost 160 years, potato chips have grown to become a global sensation. They come in many different sizes, shapes and flavours; from rippled original to regular barbeque. It is estimated that potato chip sales are in excess of \$16.4 billion US dollars worldwide and contribute to 35.5% of the total savoury snack market (Datamonitor, 2009). On an international scale, potato consumption is ranked second behind rice, and potato chips popularity is rapidly on the increase (Harmon, n. d.). Even though potato chips consumption is a multi-billion dollar market, not much investigation has been conducted

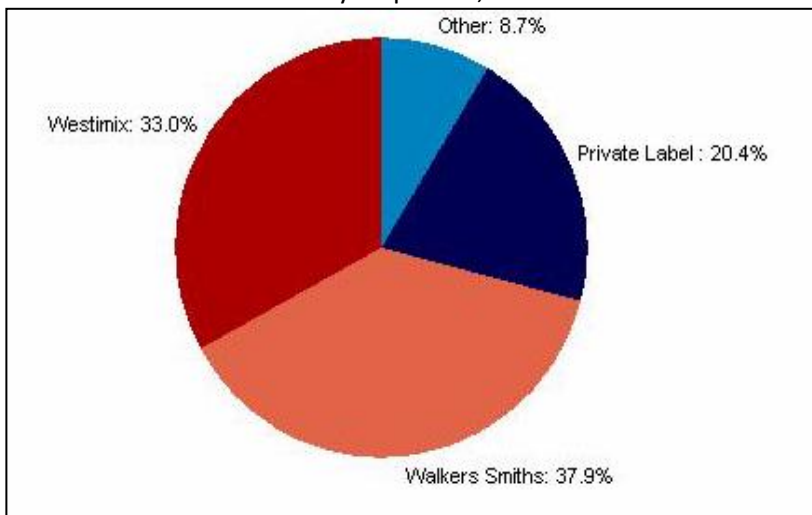
into the market’s newcomers; especially, here in the Netherlands. As I stroll through my local supermarket, I find it interesting to see a combination of multi-national brands, such as Frito-Lays, situated next to less known brands such as Hoeksche. How do these brands compete? Is it on price? Quality? Or ... something else? What is the business strategy for small start-up producers, and how can they strengthen their market position against global conglomerates?

To begin to analyze the Dutch potato chip market more intensely, I enlisted the help of Anna Orywal, and her group of fellow undergraduate business students at the University of Maastricht, Maastricht, the Netherlands. They were conducting a market research project on behalf of, coincidentally enough, Hoeksche Chips. As a recent entrant into the Dutch potato chip market, Hoeksche provides a good representation of small start-up manufactures and furthermore, a good foundation for the basis of this report. Orywal’s Maastricht based team agreed to share their expertise in market analysis, and cooperate in data collection on consumer behaviour. The methodology of our analysis will be explored and the results of our findings will be outlined. I have decided to take a marketing approach to this investigation. As such, I will primarily focus on the four “P’s” of marketing: Price, Product, Place and Promotion. The results gathered from our cooperation, through survey distribution, will be analyzed and applied to these marketing principles. It is the main goal of this report to outline particular factors that may be relevant and rewarding for new market entrants. The report will begin with a brief introduction regarding the Dutch potato chip market, as well as Hoeksche Chips; it will be followed by an explanation and analysis of the market environment; and will conclude with opportunities and recommendations for future business growth, using Hoeksche Chips as an example.

**The Dutch Market for Potato Chips**

In the Netherlands, potato chips are a commodity of growing interest. Over the past several years, potato chip manufactures have seen increased market stability and consecutive annual sales growth. Such conditions have been a catalyst for both development and expansion. New entrants have emerged, bringing local flavour to the Dutch market place; product lines have been developed, bringing more variety to consumers; and new products have been developed, bringing greater choice to customers. Although potato chips popularity is on the rise, other markets, such as for popcorn, savoury snacks, and snack-nut products, remain very competitive.

According to a 2003 study conducted by the business information company Datamonitor, the Dutch potato chip market is dominated by two major players: Walker Smith (37.9%), and Westmix (33.0%). Coincidentally, both consumer goods manufactures are owned by Pepsi Co., and control a combined market share of 70.9%. Product brands from these firms include Lay’s, Doritos, and Tostitos. The remaining market is divided between Private Label (20.4%) and Small Players [Other Category] (8.7%). See Figure 1 below (Adapted from Datamonitor, 2003: 7):



**Figure 1 - Dutch Potato Chip Market Share, % by Value**

Unlike other European countries, such as neighbours Germany and Belgium, potato chip consumption (per capita) in the Netherlands is far greater. Datamonitor (2003: 5) suggests this is a direct result of a more established snacking culture. Even though more chips are consumed, the overall value of the Dutch potato chips market is slightly lower than one may expect. Current estimates place the market at a value of \$146 million, with annual growth rates exceeding 1.2%. New market entrants are sure to increase overall value; especially with the introduction of healthier chips choices. Higher per capita consumption may translate into greater demand for low fat, low salt alternatives. As for distribution, potato chips products are sold through a variety of mediums: standard grocers, traditional grocers, convenience stores, kiosks, and gas stations. Some specialty chip manufactures sell their product specifically to small, whole-food outlets, or small, local businesses, while other more established players focus sales efforts on major shopping centers.

### **Hoeksche, A Potato Chips Company**

Hoeksche Chips, created in 2002, is a Dutch company that specializes in premium potato chips. It was founded by three small-scale farmers in a region called Hoeksche Waard (near Rotterdam). The idea behind Hoeksche stems from the farmer's individual struggles with rising costs. They realized that by joining forces and combining operations, each farmer could reduce their farming costs dramatically. As a result, cooperation has become a key element of the company's success; allowing the farmers to share expertise, and take advantage of economies of scope and scale. The farmers each operate their own farm independently, but contribute collectively on the supply of potatoes to their company. A nearby processing facility, completely owned by the firm, transforms the raw potatoes into chips for sale throughout the Netherlands.

Currently, the company sells their chips in over one thousand retail shops in the Netherlands. Retail activities are primarily targeted to small traditional grocers and small whole-food stores, with larger retail activity in standard grocers near major cities. The firm strives to make a difference in the market place by reducing their carbon foot print, and upholding their commitment to corporate responsibility. Each step in production, from harvesting to processing, is done with the strictest of standards for both customers and the environment. Hoeksche cultivates their potatoes without using any environmentally unfriendly substances. This prevents their final product from causing allergies, and further contributes to the company's commitment on sustainability. In addition, the only additives added to each chips batch is sea salt or black pepper. During the final stages of production, even more commitment to detail is demonstrated. First, slicing and processing of each potato is completed with the peel on. Secondly, all chips are baked in one hundred percent sunflower oil. These features add to a solid product that could, if marketed correctly, stand out in front of the competition (Dreiling, Orywal, Rezvani, Timmers, and Vulink, 2009).

The company markets their product as "Premium Potato Chips," distinguishing its unique processing methods, and its distinctive characteristics; more taste and crunchiness, combined with low saturated fat, and minimum use of salt. Their mission remains the same, even after seven years: "to run three independent farms profitably, while maintaining an integrated company, and adding value to potatoes" (Hoeksche, 2009).

## **1. METHODOLOGY**

Developing an appropriate research plan, for investigation and analysis, is of essential importance. It is a lengthy task which requires careful development and precise application of different statistical tools. The exact development of this particular research plan will not be discussed in depth in this paper; although, a brief outline will be presented. Every study begins with basic rules or assumptions,

describing what one expects to find or be able to prove. In this case, several assumptions were made not only concerning the relationship between demographic factors such as age, gender and income level, but also concerning an individual's attention to health awareness when purchasing potato chips. In order to provide a short overview of which questions and assumptions this study dealt with specifically, the Maastricht student research group has kindly agreed to share their statistical research questions. A list of the relevant questions used to arrive at the questionnaire and consequently, at this investigation's results, can be seen as follows (Adapted from Dreiling et al., 2009):

**Research Question 1:** Is the proportion of consumers who purchase potato chips at the location where they do their main grocery-shopping equal to the proportion of consumers who purchase potato chips at another location?

**Research Question 2:** Is there a relationship between income and the location where consumers purchase potato chips?

**Research Question 3:** Are consumers likely to purchase premium potato chips?

**Research Question 4:** Is there a relationship between consumer's monthly net income and the decision to purchase premium potato chips?

**Research Question 5:** Does age influence the frequency of purchasing premium potato chips?

**Research Question 6:** Does nationality influence consumer's decision to purchase premium potato chips?

**Research Question 7:** Does the packaging design of Hoeksche chips influence consumer's decision to purchase premium potato chips?

**Research Question 8:** Do respondents have a preference regarding the shape of potato chips?

**Research Question 9:** Is there a relationship between the flavour of potato chips and consumer's purchasing decision of premium potato chips?

**Research Question 10:** Are chips qualities equally important to consumers when purchasing potato chips?

**Research Question 11:** Is there a relationship between gender and consumer's decision to purchase healthy potato chips?

**Research Question 12:** Does the Dutch origin of potato chips influence consumer's reservation price?

Taking these twelve questions as the foundation for investigation is just one piece of the puzzle. The next step involves a decision on the sample size, as well as the data collection method. As no previous research has been conducted for potato chips in the Maastricht – Aachen region, the decision was made to conduct new primary data collection. A survey was chosen as the best means of obtaining this data. The survey's questionnaire was developed and tested using a cross-sectional design scheme. This scheme involves the systematic collection of quantitative information (Solomon, Marshall, and Stuart, 2008: 582). The questionnaire was designed to be distributed not only in the Netherlands, but also in neighbouring villages of Germany and Belgium. As a result, the original English version was translated

into both German and Dutch simultaneously. It consists of eighteen questions and was designed in such a way that, unambiguous, unbiased and statistically significant conclusions could be drawn (See APPENDIX A for an example of the survey). Although I will not elaborate specifically on the creation and development of this questionnaire, I will mention it involved a lengthy process; a process of matching, collaboration and statistical testing. Questions needed to be connected with the research assumptions, as well as appropriate statistical tests. To ensure statistical significance, it was determined that a minimum target sample size of 150 respondents would be required. Of the 150 respondents, 30 or more would need to be from each of the three previously defined nationalities independently: German (30), Belgian (30), and Dutch (30).

Our questionnaire participation turned out to exceed initial estimates. After a period of two weeks the final count of respondents was around 233 participants, but after close inspection only 207 were eligible: 118 Germans, 51 Dutch and 38 respondents of other nationalities, which included Belgians. The respondent's gender was divided between 61% male and 39% female. Once obtained, the questionnaire data was manually entered into SPSS for greater analysis. This converted the respondent's individual answers into quantitative output. It is not within the scope of this paper to explain the statistical tests performed in SPSS, but for reference, the outputs of the conducted tests can be found in APPENDIX B.

## **2. MARKET RESEARCH AND THE FOUR "P" S**

Since this report takes a specific interest in marketing, special attention was given to ensure the questionnaire would cover the principles: place, product, price and promotion. As outlined below, certain questions relate directly to precise market principles. Each of the four principles will be identified, the particular questions pertaining to the principles will be highlighted and the results of the survey will be explained. It is important to note that the original survey was conducted with the emphasis on premium potato chip purchases, and more specifically, purchases of Hoeksche chips. When referencing particular Research Questions, the discussion of premium potato chips will be addressed. Given that premium potato chips are of higher cost, it has been determined that premium potato chips are considered chips of higher price, and therefore, higher consumer cost. Hoeksche is representative of start-up producers in the Dutch potato chip market.

## **3. ANALYSIS AND RESULTS**

### **3.1 Place**

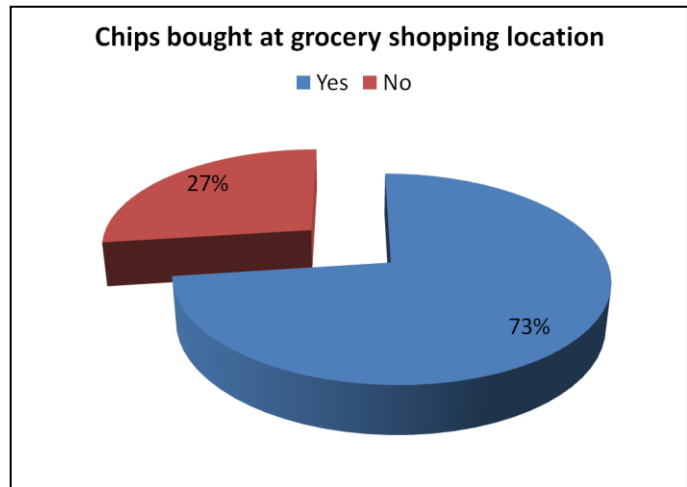
Relevant survey questions included: question two, question three, and question eighteen.

By analyzing various statistical tests and comparing the results to Research Question One (page 9), it was concluded that the proportion of consumers who purchase potato chips at the location where they do their main grocery shopping is higher than the proportion of consumers who purchase their potato chips at other locations (See Figure 2 below). Specifically, 151 out of the 207 respondents answered that they buy potato chips at the location where they do their main grocery shopping. Therefore, locations such as gas stations or movie theatres seem rather inappropriate as attractive sales locations.

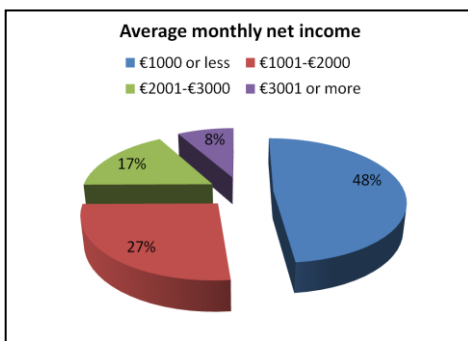
**Figure 2 - Respondents' Potato Chips Buying Behaviour**

(Adapted from Dreiling et al., 2009)

We also thought it would be interesting to analyze the relationship between income and the location where chips are purchased. In reference to Research Question 2 (page 9), our investigation yielded an interesting result. According to our findings, respondents with an average monthly net income of below 3001 Euros (as indicated by the questionnaire) tend to buy their potato chips at big grocery stores, while individuals with incomes exceeding 3001 Euros/month prefer to buy potato chips at other locations. A graphical representation, divided by representation groups, of average monthly incomes may be seen below (Figure 3). Given the indication that monthly income effects purchasing location, the next natural question is to ask where are the most popular purchasing locations? As survey question 3 indicates, the most popular potato chip buying locations include discounters, large grocery chains, and other, smaller operations. Figure 4 illustrates this relationship. Discounters and large grocery chains are popular places for main grocery purchases. These findings coincide with the results from Research Question 1. Discounters, such as Aldi and Lidl, provide customers with high quality products at a reasonable price. Large grocery chains, such as Albert Heijn on the other hand, offer high quality, great customer service, and spot sales. Prices may not be as low as discounters, but the selection of products is far greater. All of our findings indicate that these purchasing locations are of great interest to the consumer. Given that 73% of the people polled indicated that they purchase potato chips while grocery shopping, potato chips manufacturers would be well positioned to sell their product in these establishments.

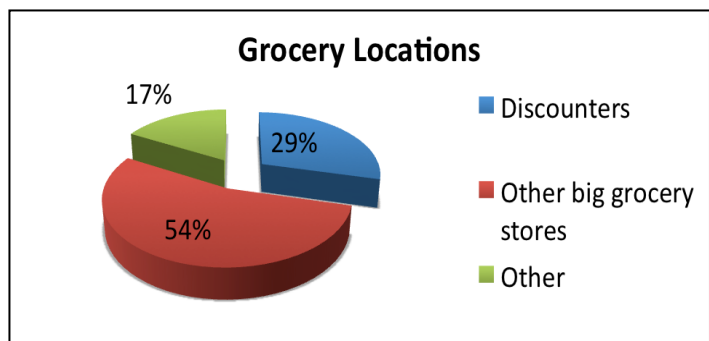


**Figure 3: Division of Monthly Net Income**



(Adapted from Dreiling et al., 2009)

**Figure 4: Division of Popular Chips Purchasing Locations**



(Adapted from Dreiling et al., 2009)

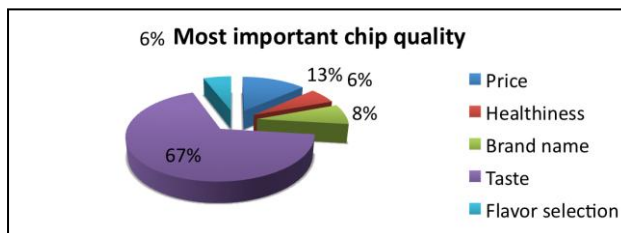
**3.2 Product**

Relevant survey questions included: question seven, question eight, question ten, question eleven, and question twelve.

Various potato chip competitors inhabit the Dutch market. Being able to distinguish your product from the competition is important. The first step is to understand your market place and understand your customer’s needs. What characteristics make consumers attracted to your product? According to the results from survey question eighteen, respondents are more concerned with “taste” (67%) than “price” and “flavour” selection combined (19%). Other characteristics included “brand name” and “healthiness.” Figure 5 shows the division between the various potato chip qualities. Research Question eight (page 10), addressing a respondent’s preferred chips shape, found that the shape of chips was perceived unimportant to consumers when making a purchasing decision. As a contrast, flavour selection, as addressed in Research Question nine and ten respectively (page 10), greatly influenced the purchasing decision of a consumer. It appeared that with respect to favourite flavour, “salted” (24%) and “paprika” (28%) were predominant (Total 52%), while unpopular flavours were “sour cream” (15%) and “chilli” (15%) (See Figure 6).

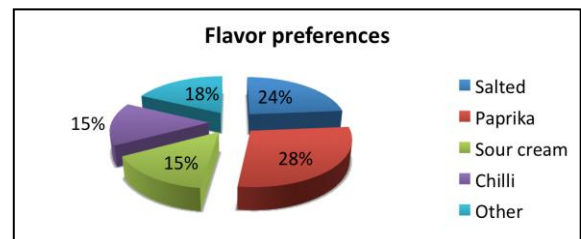
The overall analysis of this particular marketing principle produced a variety of interesting results. According to question eleven of the questionnaire, most respondents considered chips qualities (taste, healthiness, price, etc.) important when purchasing chips. Given that chip consumption is far greater (per capita) in the Netherlands, than any other direct European neighbour (Datamonitor, 2003: 5), it was the author’s assumption that healthiness would be the number one concern of most consumers; especially, given the push for healthier choices in recent years. This conclusion was challenged by the results of survey question twelve, which indicated that “taste,” “price,” and “brand name,” influenced a consumers purchasing decision far greater than the perceived “healthiness” of the given product. These findings were also supported by survey question ten, which indicated directly that healthiness was not a major concern when purchasing potato chips. Interestingly, this highlights the importance of product selection, and product scope; particularly, for new entrants into the Dutch potato chip market.

**Figure 5:**  
Division of Popular Chips Qualities



(Adapted from Dreiling et al., 2009)

**Figure 6:**  
Division of Popular Chips Flavours



(Adapted from Dreiling et al., 2009)

### 3.3 Price

Relevant survey questions included: question twelve, question thirteen, question fourteen, question seventeen, and question eighteen.

As described previously, “price” was chosen as the second most important selection criteria when purchasing chips; second behind “taste”. Consumers indicated that they would be willing to pay a premium for local potato chips, if they perceived these products were of higher quality, but would not pay a premium just for having a local brand. According to survey question thirteen, potato chips priced at 1 Euro or less, were not attractive to consumers; primarily once again, because of the perceived relationship between cost and quality. On the other hand, highly priced potato chips (priced 1.51 Euros or more) were expected to be undesirable due to their high cost. The findings of this report contradicted these initial assumptions. Consumers were actually inclined to spend more on potato chips if they

believed the product would provide better taste and flavour selection. This is supported by the results of survey question thirteen: chips priced 1 Euro or less – selected by 13.5% of respondents, chips priced 1.01 – 1.50 Euros – selected by 32.9% of respondents, and chips priced 1.51 Euros or above – selected by 53.6% of respondents.

Another area of investigation was demographics and the relationship to a chips price. Our findings, in reference to Research Questions 4 and 5 (page 10), indicate a direct relationship between monthly income and the willingness to spend more money on potato chips. The same can also be concluded about a customer's age and their buying habits. For starters, consumers with a high monthly income (2,001 Euros or greater) were more likely to purchase higher priced potato chips than individuals with incomes less than 1,000 Euros/month. A similar relationship can also be created between a consumer's age and purchase behaviour. Supported by survey question seventeen, as a customer's age group increases, they are more likely to purchase higher priced chips. These results were equivalent to our initial assumptions. Individuals in higher age categories tend to have greater monthly incomes, and therefore, greater flexibility to purchase higher priced potato chips. University students, in comparison, usually represent the 16-25 year old age category and do not have the financial freedom to purchase chips at a greater price. They are bound by external forces to purchase potato chips that fit within their limited budgets. These results highlight the importance for firms to clearly identify their target market. If firms would like to sell potato chip products in a city primarily populated by students, such as the case in the Dutch city Maastricht, they must be in sync with the budgetary constraints of their demographic; ensuring ultimate success.

### **3.4 Promotion**

Relevant survey questions included: question five, question six, question sixteen, question seventeen, and question eighteen.

Since potato chips represent, for most people, a commodity product, it is important to promote a particular product's uniqueness. Is it simply effective to change packaging, or is it more advantageous to develop an extensive external marketing campaign? These ideas were analyzed and results shown. Research Question seven (page 10) addressed the appeal of the packaging design in a consumer's decision to purchase a particular brand of potato chips. Although our initial results, supported by survey question six, indicated that customers were not influenced by a particular firm's chips bag design, they were however, influenced by the perceived quality the bag design conveyed. Interestingly enough, respondents who answered survey question six, indicated that they liked Hoeksche's bag design, but would not purchase the product based on its "healthiness" appeal. This is an important distinction for players in the Dutch potato chip market. Consumers do not associate healthiness directly with potato chip quality.

As for demographic elements, such as age, gender, nationality, and income, surprisingly, each element had minimal impact on the overall design interest of a producer's packaging. Yes, there was a slightly greater interest in "premium potato chip" brand design by Dutch citizens, but other characteristics such as gender differentiation had little or no effect on purchase behaviour. From our previous discussions, it can be concluded that perceived quality (including taste and flavour selection), and price are key factors to consider in a promotional strategy. Age as well as monthly income, are also important elements to consider. Consumers with greater disposable incomes have more flexibility in potato chip purchases, and react less dramatically to changes in market price, as compared with students for example. It is important for producers to decide on a particular target market (target age group) and adjust their promotional plan appropriately.

#### 4. LIMITATIONS

Naturally, this market investigation and subsequent research report encountered a variety of challenges. Financial capabilities, restricted timelines, inadequate resources and narrow expertise limited the potential and effectiveness of this market analysis. With greater resources, time, and financial assistance the outcome of this study would have been much more rewarding. It is also important to mention challenges faced during the primary data collection and analysis. To obtain a better understanding of the Dutch potato chip market, a greater amount of questionnaire participants should have been acquired. Once again, resource challenges limited the ability of this investigation to survey large amounts of people. The statistical interpretations on a sample size of 207 respondents, does not give a completely accurate picture of the entire potato chip market in the Netherlands, but it does however, indicate possible consumer behaviour in the regions we targeted. It would have also been more beneficial to survey an equal number of both male and female consumers. This report mostly focused on the findings of male respondent's (61%). A greater representation of female respondents would have strengthened the study's dataset. In addition, the Belgian sample size was relatively small when compared to the two other sample nationalities: German and Dutch. Since the overall sample size cannot be regarded as truly representative of Belgian interests in the Netherlands, the research can only yield pointers and hints for further research on Belgian chips buying behaviour in the Netherlands.

#### CONCLUSIONS AND RECOMMENDATIONS

Price, Place, Product and Promotion are all essential aspects to be considered when entering a new market. Entrants are commonly faced with a variety of challenges and barriers from product inexperience, to existing competitor loyalty. Being able to adapt, move quickly and target consumer's effectively, creates a desired competitive advantage. The four major principles of marketing can help businesses do just that: determine a pricing strategy, locate a responsive retail location, develop a desired product line, and create an effective promotional plan. Each principle is equally important, and each principle must not be ignored.

Throughout this investigation I have focused primarily on new start-up producers. I have considered Hoeksche Chips to be a good representation of the typical new market entrant, and have used their profile, plan and strategies as a comparative tool for other small scale players. Hoeksche entered the Dutch potato chips market in 2002. Since then, they have expanded from a regional potato chip supplier, to a national potato chips supplier. They have faced a considerable number of challenges, including, most recently, decreased inventory turnover (Dreiling et al., 2009). Competition in the Dutch potato chips market, predominantly controlled by the multi-national conglomerate Pepsi Co., is on the increase. Pepsi's market dominance creates many issues for smaller scale players. Domestic firms, such as Hoeksche, find it difficult to compete on price. Hoeksche's current strategy is to compete on quality instead of price. The company has decided to adopt a "premium product" strategy; targeting their product as a healthier alternative to the competition. Unfortunately, their current strategy is not feasible in the long term. This analysis of customer opinion and consumer behaviour has concluded a "healthier choice" approach is not advisable in the long term. According to studies by my Maastricht colleagues (Dreiling et al., 2009), Hoeksche Chips is facing a reduced inventory turnover that increases year by year. This may be an indication of weaknesses in their corporate strategy.

Re-structuring the firm's business strategies may improve company health and increase incremental revenues. By focusing efforts on improving the producer's four marketing principles: Price, Place, Product and Promotion, Hoeksche Chips may be able to reposition itself into a better strategic position. Taking advantage of customer's demand for greater taste and more diverse flavours can assist Hoeksche in attracting greater market share. The company could sustain its current "healthy choice" image, but

emphasize their chips quality as a primary selling point. According to this report's findings, price is also an important element in the consumer's purchasing decision. Products at a higher price point, in our case exceeding 2.00 Euros/bag, limit the available consumer base. Depending on an individual's monthly income, certain price points are unattainable. This same relationship is true for consumer age groups. It was discovered that older individuals are more inclined to purchase premium or more expensive potato chips than younger age groups. A relationship between age and monthly income can be identified. Younger age groups are usually equated with lower monthly income, while older age groups have greater financial freedom. This distinction and connection must be considered when targeting a particular product. Currently, Hoeksche prices their chips at a high market value near the 2.60 Euros/200g bag price point. Their intention is to attract increased student consumer's; especially, in student cities such as Eindhoven and Maastricht. With a price point exceeding 1.80 Euros/bag, Hoeksche will encounter challenges with this goal. Other demographic elements this analysis considered included gender and nationality. The conclusion however, indicated that gender and nationality played a very minimal role in consumer purchasing behaviour. It could be noted that Dutch consumer's favoured "premium" brands because of their perceived attention to quality, but were unwilling to pay an addition amount for locally produced potato chips. Overall consumer preference among the various nationalities still enforced taste and flavour variety as their number one purchasing considerations. This emphasises the importance for potato chip producers to diversify their flavour range and improve their chips taste.

In addition, product placement is an important decision to consider. Where a product is located, ultimately determines its corresponding revenue. According to the findings on location, most respondents indicated they purchased potato chips while buying groceries. Target centers for grocery shopping were identified as discount retailers, and large grocery store chains. To improve sales at Hoeksche, the company may consider approaching these two grocery mediums simultaneously. Discounters, such as Aldi and Lidl, offer large turn over opportunities. The revenue per bag unit is considerably lower, due to reduced prices on all merchandise, but given the high turnover rates, revenue could be increased by volume. The advantages of large grocery store chains such as Jumbo and Albert Heijn, is their nation-wide reach. Hoeksche could use this advantage to enter new regions, and improve their products reach.

All of these improvements will not be successful without a targeted and effective promotional campaign. Consumer interest towards chips packaging highlighted the importance to promote key chip qualities, not corporate strategies. Respondents indicated that they were only responsive to packaging if it increased the perceived product quality, and emphasized their interest in a chips taste and flavour options. If a company such as Hoeksche wants to promote its corporate strategy of healthier eating, an extensive advertising campaign will need to be undertaken. Given the limited financial resources of many start-up entrants, including Hoeksche, intensive nation-wide advertizing campaigns are unrealistic. Small scale producers who want to capture marketshare can easily focus on little adjustments and by encompassing the four "P's" of marketing, ensure they meet the needs of their consumers within the Dutch potato chip market.

Adaptation combined with small changes in strategy, can assist entrants in the competitive environment presented by the Dutch Potato Chips Market. As changes in consumer demand and perception occur, producers need to be prepared for action. Companies need to remain dynamic and ahead of new product trends. Although it may be difficult for small market players, it is important for all companies to consider. Using the principles of marketing as a tool for success, new start-ups can strengthen their existing strategies and be better positioned to navigate the challenges of business in the Netherlands.

APPENDIX A

Survey Questionnaire Example

*“Dit onderzoek wordt uitgevoerd voor niet-commerciële doeleinden en kadert in een onderwijsopdracht.”*

**1. Do you buy chips?**

- Yes  No

*If you answered 'yes', please continue with question 2.*

*If you answered 'no', you don't have to answer any further questions. Thank you for your participation!*

**2. Do you buy potato chips at the location where you do your main grocery shopping?**

- Yes  No

**3. I usually buy potato chips at the following: (please only tick one)**

- Discounters (Lidl, Aldi, etc.)
- Other big grocery stores (Albert Heijn, Jumbo, Edeka, Rewe, etc.)
- Wholefood shops
- Mom-and-Pop grocery stores
- Other (please specify):

	Very unlikely	Unlikely	Neutral	Likely	Very likely
<b>4. How likely is it that you buy premium potato chips?</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**5. How often do you buy premium potato chips?**

- Never
- Once a month or less
- Twice a month
- Three times a month
- Four times a month
- Five times a month or more



**12. Which of the following five chips qualities is to be most important to you when purchasing potato chips?**  
(Please make only one cross 'X')

- Brand name
- Price
- Flavor varieties
- Taste
- Healthiness



**13. How much are you willing to spend for a bag of potato chips (200gr.)?**

- € 1 or less       € 2.01 and above
- € 1.01 - € 1.50       The price doesn't matter to me
- € 1.51 - € 2.00

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
<b>14. I would spend more money on potato chips if they were produced in the Netherlands.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**15. What is your gender?**

- Male       Female

**16. What is your nationality?**

- German       Belgian
- Dutch       Other

**17. What age range do you fall into?**

- 15 years old or less       36 - 45
- 16 - 25       46 - 55
- 26 - 35       56 years or older

**18. What is your average monthly net income?**

- € 1,000 or less       € 3,001 to € 4,000
- € 1,001 to € 2,000       € 4,001 and more
- € 2,001 to € 3,000       prefer not to answer

**Thank you for your participation! 😊**

**APPENDIX B**

**SPSS Survey Results**

Research Question 1

**Table B1**

Frequencies

Chips bought where grocery

	Observed N	Expected N	Residual
Yes	151	103,5	47,5
No	56	103,5	-47,5
Total	207		

**Table B2**

Test Statistics

	Chips bought where grocery
Chi-Square	43,599 <sup>a</sup>
df	1
Asymp. Sig.	,000

Research Question 2

**Table B3**

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Location of chips purchase * Average monthly net income	207	99,0%	2	1,0%	209	100,0%

**Table B4**

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	51,212 <sup>a</sup>	6	,000
Likelihood Ratio	42,939	6	,000
Linear-by-Linear Association	27,393	1	,000
N of Valid Cases	207		

**Table B5**

Location of chips purchase \* Average monthly net income Crosstabulation

			Average monthly net income				Total
			€1000 or less	€1001 - €2000	€2001 - €3000	€3001 and more	
Location of chips purchase	Discounters	Count	33	22	4	1	60
		% within	33,0%	40,0%	11,4%	5,9%	29,0%
		Average monthly net income					
Other big grocery stores		Count	60	26	22	4	112
		% within	60,0%	47,3%	62,9%	23,5%	54,1%
		Average monthly net income					
Others		Count	7	7	9	12	35
		% within	7,0%	12,7%	25,7%	70,6%	16,9%
		Average monthly net income					
Total		Count	100	55	35	17	207
		% within	100,0%	100,0%	100,0%	100,0%	100,0%
		Average monthly net income					

Research Question 3

**Table B6**

**One-Sample Statistics**

	N	Mean	Std. Deviation	Std. Error Mean
Likelihood of premium chips purchase	207	2,96	1,439	,100

**Table B7**

**One-Sample Test**

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Likelihood of premium chips purchase	-.435	206	,664	-.043	-.24	,15

Research Question 4

**Table B8**

**Descriptives**

Likelihood of premium chips purchase

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					€1000 or less	100		
€1001 - €2000	55	3,05	1,420	,191	2,67	3,44	1	5
€2001 or more	52	3,60	1,257	,174	3,25	3,95	1	5
Total	207	2,96	1,439	,100	2,76	3,15	1	5

**Table B9**

**ANOVA**

Likelihood of premium chips purchase

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	36,743	2	18,372	9,613	,000
Within Groups	389,866	204	1,911		
Total	426,609	206			

Research Question 5

**Table B10**

**Descriptives**

Frequency of premium chips purchase

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
25 years or younger	92	2,02	1,109	,116	1,79	2,25	1	5
26 - 35 years	53	2,06	1,082	,149	1,76	2,35	1	5
36 - 45 years	34	2,35	1,390	,238	1,87	2,84	1	6
46 years or older	28	2,75	1,323	,250	2,24	3,26	1	6
Total	207	2,18	1,201	,083	2,02	2,35	1	6

**Table B11**

**ANOVA**

Frequency of premium chips purchase

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	13,223	3	4,408	3,153	,026
Within Groups	283,801	203	1,398		
Total	297,024	206			

Research Question 6

**Table B12**

**Descriptives**

Likelihood of premium chips purchase

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
German	118	2,86	1,473	,136	2,60	3,13	1	5
Dutch	51	3,20	1,414	,198	2,80	3,59	1	5
Other	38	2,92	1,363	,221	2,47	3,37	1	5
Total	207	2,96	1,439	,100	2,76	3,15	1	5

**Table B13**

**ANOVA**

Likelihood of premium chips purchase

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3,976	2	1,988	,960	,385
Within Groups	422,633	204	2,072		
Total	426,609	206			

Research Question 7

**Table B14**

**Descriptives**

Likelihood of premium chips purchase

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					Yes	94		
Neutral	51	3,00	1,428	,200	2,60	3,40	1	5
No	62	3,23	1,407	,179	2,87	3,58	1	5
Total	207	2,96	1,439	,100	2,76	3,15	1	5

**Table B15**

**ANOVA**

Likelihood of premium chips purchase

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8,398	2	4,199	2,048	,132
Within Groups	418,211	204	2,050		
Total	426,609	206			

**Table B16**

**Descriptives**

Likelihood of premium chips purchase

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					Yes	73		
Neutral	50	2,54	1,446	,204	2,13	2,95	1	5
No	84	3,00	1,406	,153	2,69	3,31	1	5
Total	207	2,96	1,439	,100	2,76	3,15	1	5

**Table B17**

**ANOVA**

Likelihood of premium chips purchase

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12,874	2	6,437	3,174	,044
Within Groups	413,735	204	2,028		
Total	426,609	206			

**Table B18**

**Descriptives**

Likelihood of premium chips purchase

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
					Yes	88		
Neutral	58	2,81	1,317	,173	2,46	3,16	1	5
No	61	3,00	1,402	,180	2,64	3,36	1	5
Total	207	2,96	1,439	,100	2,76	3,15	1	5

**Table B19**

**ANOVA**

Likelihood of premium chips purchase

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1,740	2	,870	,418	,659
Within Groups	424,868	204	2,083		
Total	426,609	206			

Research Question 8

**Table B20**

Observed Numbers of different shape preferences:

	Observed N
Wavy/Rippled	57
Flat	55
No preference	95
Total	207

**Table B21**

Chi-square test:

**Frequencies**

Favorite shape			
	Observed N	Expected N	Residual
Preference	112	103,5	8,5
No preference	95	103,5	-8,5
Total	207		

**Test Statistics**

	Favorite shape
Chi-Square	1,396 <sup>a</sup>
df	1
Asymp. Sig.	,237

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell

Research Question 9

**Table B22**

**Descriptives**

Purchase premium chips if favored flavor offered

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Salted	49	2,69	,918	,131	2,43	2,96	1	5
Paprika	59	3,29	1,084	,141	3,01	3,57	1	5
Chilli	31	3,48	,962	,173	3,13	3,84	1	5
Sour	31	3,23	1,055	,190	2,84	3,61	1	5
Cream								
Other	37	3,46	1,070	,176	3,10	3,82	1	5
Total	207	3,20	1,054	,073	3,05	3,34	1	5

**Table B23**

**ANOVA**

Purchase premium chips if favored flavor offered

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	18,019	4	4,505	4,315	,002
Within Groups	210,860	202	1,044		
Total	228,879	206			

Research Question 10

**Table B24**

Chi-Square Test

Frequencies

Most important chip qualities			
	Observed N	Expected N	Residual
Price	23	34,2	-11,2
Healthiness	10	34,2	-24,2
Brand name	13	34,2	-21,2
Flavor selection	10	34,2	-24,2
Taste	115	34,2	80,8
Total	171		

**Table B25**

Test Statistics

	Most important chip qualities
Chi-Square	241,953 <sup>a</sup>
df	4
Asymp. Sig.	,000

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 34,2.

Research Question 11

**Table B26**

T-Test

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Health concern when buying chips	Male	127	2,75	1,154	,102
	Female	80	2,75	1,278	,143

**Table B27**

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.						95% Confidence Interval of the Difference	
				t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Health concern when buying chips	Equal variances assumed	2,390	,124	-,011	205	,991	-,002	,172	-,341	,337
	Equal variances not assumed			-,011	155,369	,991	-,002	,176	-,349	,345

Research Question 12

**Table B28**

Crosstabs

Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Willingness to spend for chips * Spend more money for products from NL	207	99,0%	2	1,0%	209	100,0%

**Table B29**

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	,659 <sup>a</sup>	4	,956
Likelihood Ratio	,663	4	,956
Linear-by-Linear Association	,322	1	,570
N of Valid Cases	207		

a. 1 cells (11,1%) have expected count less than 5. The minimum expected count is 2,16.

**Table B30**

Willingness to spend for chips \* Spend more money for products from NL Crosstabulation

		Spend more money for products from NL			Total	
		Disagree	Neutral	Agree		
Willingness to spend for chips	€1 or less	Count	18	8	2	28
		% within Spend more money for products from NL	13,8%	13,1%	12,5%	13,5%
	€1.01 - €1.50	Count	45	18	5	68
	% within Spend more money for products from NL	34,6%	29,5%	31,3%	32,9%	
€1.51 or above	Count	67	35	9	111	
	% within Spend more money for products from NL	51,5%	57,4%	56,3%	53,6%	
Total	Count	130	61	16	207	
	% within Spend more money for products from NL	100,0%	100,0%	100,0%	100,0%	

## REFERENCES

Corporate Website Hoeksche Chips. (2009). Retrieved December 5, 2009, from <http://www.ambachtelijkechips.nl/>

Datamonitor. (2009). *Savory Snacks: Global Industry Guide*. Retrieved December 6, 2009, from Business Source Premier (EBSCO)

Datamonitor. (2003). *Potato Chips Industry Profile: the Netherlands*. Retrieved December 5, 2009, from Business Source Premier (EBSCO)

Dreiling, J., Orywal A., Rezvani, A., Timmers, P., Vulink, J. 2009. *What consumer and situational factors influence consumer's decision to purchase premium potato chips?* Unpublished Working Paper, Maastricht University School of Business and Economics, Maastricht, the Netherlands.

Harmon, John. E. (n.d.). The Atlas of Popular Culture in the Northeastern United States. Retrieve December 1, 2009 from <http://www.geography.ccsu.edu/harmonj/atlas/potchips.htm>

Solomon, M.R., Marshall, G.W. & Stuart, E.W. (2008). *Marketing: Real People, Real Choices (Fifth Edition)*. New Jersey: Pearson Education/Prentice Hall; ISBN 013157910