


**Effectiveness of price and nonprice
promotions, App and communication on
sales uplift for dairy shoppers in Twente**

MSc Business Administration in Strategic
Marketing and Digital Business

THESIS



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Source: Royal FrieslandCampina, 2019



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Author

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Research abstract

The aim of this master thesis is to study whether sales uplift increases more with an app and communication in price or non-price promotions at Jumbo stores in Twente region, The Netherlands from week 1 to week 30 in 2019 with data gathered from FrieslandCampina in Amersfoort on promotional campaigns conducted for Jumbo stores. The novelty of this research is the fact that the effectiveness of price and non-price promotions will be examined in the context of an App for dairy shoppers in Twente region on sales uplift. This research uses only quantitative methods and data gathered from FrieslandCampina in Amersfoort on promotional campaigns conducted for Jumbo stores. Thus, using real retailer data taken from real life business conditions. For the analysis of the data, a multiple linear regression is used for all entries because we deal with three predictors. Results show that there is a significant positive relationship of nonprice promotions on sales uplift. Next, it was discovered that there is an insignificant negative relationship of App on sales uplift. Thirdly, communication affects insignificantly and positively sales uplift. This thesis will serve as an advice on promotions for FrieslandCampina.

Key words: dairy products, shoppers, customers, brand, shopper marketing, sales promotion, in-store marketing, price promotion, non-price promotion, digital, app, online, communication

Chapter 1. Introduction

1.1 Background

Marketers have given most focus on consumers, they try to understand who they are and what their behavior is and to predict it. Attempts have been undertaken for customer profiling and segmentation in order to empower products to bring into line products and services, which would satisfy explicit needs (Ruiz, Athey, & Blei, 2019). Despite this, over the years marketers have reached to an understanding that end consumers may be encouraged and stimulated during their shopping trips as well. Thus, came the age of 'shopper marketing' in marketing of products in various retailers. Moreover, manufacturer companies are continuously adjusted their strategies from long-established marketing tools to in-store marketing pivots hoping to influence consumers' decisions together with their impulse buying in store (Amos, Holmes, & Keneson, 2014; Chang, Yan, & Eckman, 2014). As Sorensen et al. (2017), also state that for instance, a big portion of firms devote over 8% of the total revenue on in-store marketing. And thus, the investment could reach up to 40% if costs for general trading are summed for these firms (Grewal D., Ahlbom, Beitelspacher, Noble, & Nordfalt, 2018).

An example is FrieslandCampina, which has several dairy products that rely on their in-store marketing for achieving revenues for the company. This means that for these products the company invests a lot of money into marketing activities within stores. A famous chocolate milk drink in The Netherlands, Chocomel for instance, has about 70% revenues made via in-store marketing promotions, which has a practical relevance. An example of FrieslandCampina in-store marketing would be: Coolio, Collierplan, POS shelf, Win Deal, Experience, Premium, Bulk display etc. refer to Appendix 4 for full list. Other in-store marketing can be made for example with digital displays, digital visual panels, and LED screens. Unfortunately, in-store marketing promotions at FrieslandCampina, their execution and implementation comes at a cost for the company. Therefore, shopper marketing is quite crucial part of dairy businesses apparently (FrieslandCampina, 2019). For these reasons, these views support the idea that shopper marketing has a central place within shopper behavior and its marketing. This thesis is on the sales uplift effectiveness of price and none price promotions.

Moreover, according to Rackley (2019) shopper marketing as: “an understanding how one’s target shoppers behave in different channels and formats, and leveraging this intelligence to the benefit of all stakeholders, defined as brands, consumers, retailers and shoppers” . Furthermore, Huddleston, Minaham, Fernandez (2016), adding further that shopper marketing is essentially the practise of shopper acumens to advance marketing efforts that pursue inspiring the behavior of shoppers at the point of their purchase (Philips, Parsons, Wilkinson, & Ballantine, 2015). Therefore, in recent times, a distinguish between shopper marketing and consumer marketing and it is important not to intertwine them (Grewal D. , Ahlbom, Beitelspacher , Noble, & Nordfält , 2018). This type of marketing is of crucial importance for companies operating in the FMCG industry. Fast-moving consumer goods mean fast selling goods/products having low price for the end consumer. These goods are also called consumer packaged goods (Investopedia, 2019). In the agency world marketers in the shopper marketing bring up: type of trip, baskets, and store traffic (Stilley, Inman, & Wakefield, 2010).

1.2 Problem Statement and Theoretical relevance

Firstly, previous research on in-store buying behavior of shoppers has been conducted by Foubert, Breuglamans, Gedenk & Rolef, 2018; Sorensen, et al. 2017; Buil, de Chernatony, Montaner, 2011; Chang, 2009, with promotional premiums of products. However, majority of price promotions literature is outdated because they only investigate relationship between sales(amount of money spent on a product) and promotions (discounts mainly). These studies from the past mainly target to research price elasticity. Tan, et al. (2018) suggest, however, that there is much more to these relationships, to be able to know the reality of promotions, for example not only pure sales and sales units, but also to take into mind actual sales and baseline sales of a product or service and the forecasting of this with a more relevant construct as sales uplift. Hence, sales uplift gives a percentage calculated from the base sales and actual sales. Therefore, this thesis will aim on investigation on the relationship of promotions towards sales uplift.

Secondly, some literature failed to investigate promotions, whose data was not conducted in real life situations, so failed to conduct an existing problem. For example, the research of Foubert

et.al (2018) made use of a simulated purchase test, so failed to use any real data. Therefore, real purchase data of retailers is required for a higher reliability and an estimation in real conditions. Lastly, there has not been research on the effectiveness of price and non-price promotions on sales uplift in the context of Twente region. The novelty of this research would be in the fact that the effectiveness of price and non-price promotions will be compared in the digital context of an app. So, in this sense the effectiveness will be measured beyond merely price elasticity, but in sales uplift. So this is worthwhile to research so as to comprehend the effect of promotions of dairy products on dairy shoppers purchase behavior more specifically. And more in essence, this thesis research aims to investigate if sales uplift increases more with either price or non-price promotions at Jumbo stores in Twente region. Therefore this study is seen from a retailer perspective.

To sum up, taking in mind the arguments above, this thesis will compensate and be more contemporary, relevant study for Twente region, by addressing these gaps in the research of promotional effectiveness on sale uplift, using actual store data.

1.3 Practical relevance

There are practical needs for this master thesis research. First of all, as mention earlier, Chocomel in The Netherlands, has about 70% revenues made via in-store marketing promotions, which makes it more important to research the effectiveness of price and non-price promotions on this brand (FrieslandCampina, 2018), refer to Appendix 2 for part of Sales Promotions overview. FrieslandCampina has gathered data for the sales of this brand and also Fristi in Jumbo stores throughout the Netherlands. However, some colleagues still wonder how to measure discount effectiveness of certain communication and mechanism and how does a nonprice promotion score on sales uplift for example. This is a pivotal reason for this research in the practical relevance of this thesis. Several teams of the company have interest of the results of this thesis and wished that this thesis to be sent to them as a document when completed. Finally, the two investigated products are in the Maturity cycle of the Product life cycle model, refer to Appendix 3 for the Product Life cycle model and all characteristics of each cycle (Weber, Werner, & Deubel, 2010). Lastly, to compare price and nonprice promotions in the digital context of an app will

contribute to FrieslandCampina by giving advice on the direction of their value proposition for Chocomel and Fristi and where to target more marketing efforts.

Subsequently, the following research question is the following:

What is the effectiveness of price and non-price promotions on sales uplift in the context of dairy drink shoppers at Jumbo stores in Twente region, the Netherlands in 2019?

This thesis is structured in several chapters. First the Introduction Chapter, introducing us to the problem of the research , the novelty of the thesis, practical and theoretical relevance and research question. The second chapter will provide the theory that will be used by considering existing theory, definitions behind the research question and the concepts used in this thesis. Next, Methodology will illustrate the research design, whose methods will provide a good basis for conducting the research of this study. Followed by the last chapters: Results, Discussion and Conclusion and Recommendations for further research.

The conceptual framework can be found in the Theory section, Figure1.

According to Van der Ven (2007), company assignments which are valued highly as these are often both rigorous and relevant: theory and practice are considered as an engaged graduation approach (Van de Ven, 2007). Thus, the internship of the researcher is being carried out at the Consumer dairy business unit of the company FrieslandCampina, which is organized into 4 business units. Having a position at this unit, it gives opportunities to gain knowledge about dairy products and shoppers and consumers. The following is a brief description of the intake internship company.

1.4 Company Profile

Royal FrieslandCampina N.V. (to be abbreviated hereinafter as FC), is the resulting cooperative company of the merger of FrieslandFoods and Campina in 2008 in The Netherlands. FC, with branch offices in 34 countries with headquarters located in Amersfoort (FrieslandCampina, frieslandcampina.com, 2019). This merge led to the creation of today's world's foremost company for products. This major player in the dairy industry had a revenue of 12.1 billion euros in 2017. Furthermore, FC exports to over 100 countries around th world and serves

millions of daily shoppers globally (FrieslandCampina, frieslandcampina.com, 2019). FC aims to achieve several aspects for its stakeholders: professionalism, attractiveness in the global dairy market. The stakeholders and the heart of FC represent: member dairy farmers, consumers, employees, and society as a whole (FrieslandCampina, 2019). There are around 18,261 member dairy farmers in the following countries: The Netherlands, Belgium and Germany. These farmers possess 100% of the Royal FrieslandCampina N.V. through a Cooperative and Farmers organization of FrieslandCampina (in Dutch: Zuivelcoöperatie FrieslandCampina U.A.), which fights for more quality of milk delivered from local farmers and sustainability. The FC's purpose is to nourish by nature. This means that by offering reliable and tasty dairy products, FC makes a contribution to securing food and nutrient security. FC also strives to limit the pressure on natural resources and the environment (FrieslandCampina, Annual Report 2018, 2018). There are four business groups also known as BG's that have unique products and unique markets. In each market an operating company exists, also named as OpCo that serves the purpose of handling the market in hand along the products being sold in given region. Refer to Appendix 1 for illustration of this structure.

1.5 FC brands proposition

In the last few years there has been a big movement of brands and products towards healthier choices over other brands. Also, a big segment has emerged of consumers who are becoming healthier conscious. In order to respond to this trend, food producers and companies are marketing their products now as "healthy alternatives" or "reduced kcal/sugar" packages (Kemp & Bui, 2015). FC does not make an exception. Moreover, end consumers are keen on paying more for healthy products. Hence, foods promoting healthy benefits: better digestive system, health, heart health and improved energy levels are favorite picks amongst consumers (Kemp & Bui, 2015) and (Pechman & Catlin, 2006). Example are all FrieslandCampina brands, which have a strong sustainable and health perspective, as mentioned before the core of the company to "nourish by nature". In addition, the use of a particular brand with a healthy and sustainable claims, could facilitate a positive association portrayal by the consumer. Furthermore, end consumers like to connect with each other while consuming the same brand, making communities or health communities. This is because they can satisfy their psychological needs,

reinforce certain identity and allowing the healthy community grow bigger while connecting with others (Kemp & Bui, 2015; Escalas, 2004). According to (Sharma & Aich, 2012) the decision-making of consumers are defined as patterns of cognitive and mental orientations. They continuously direct the methods of consumers' purchase choices. This proposition of FC is an important value proposition over its counterpart companies and competitors.

FrieslandCampina corporate website: <https://www.frieslandcampina.com/en/>



FrieslandCampina corporate headquarters building, Amersfoort, Source: (OZ, 2019)

Chapter 2. Theory

This chapter will provide definitions and clarity of the main terms in connection with the research question. Moreover, relevant theory will be discussed around the main variables of interest. Then, some hypotheses will be derived from the sections.

2.1 Sales uplift

The measure of a change in demand quantity and a change in its price is known as price elasticity. If a discount goes together with big change in demand quantity, this product is believed to be elastic i.e. responsive to price changes (Hoch, Kim, Rossi, & Montgomery, 1995; Krishnamurthi & Raj, 1991; Gijsbrechts, 1993). Although research has been done on price elasticity, nowadays it is

more important to observe any possible sales uplift of products and its main causes (Tan, et al., 2018). This is because the sales uplift gives a percentage calculated from the base sales (expected sales without promotion) and sales with promotion. Hence, sales uplift is the most effective way to investigate success of a marketing campaign. Thus, for the purpose of this thesis sales uplift will be more relevant to investigate than pure sales.

Some researchers (Palazon & Delgado-Ballester, 2009; Chatterjee et al., 2000; Guéguen & Legohérel, 2004) see effectiveness of price discounts affect significantly and change purchase behavior. According to these sources, the most common type of sales promotion implemented by companies is price discounts. However some companies in the FMCG industry, will allocate marketing sources also for nonprice promotions leading towards more purchases also like in the case of FrieslandCampina. The stir of more purchases leads to so called “sales uplift” (Tan, et al., 2018). In marketing, a sales uplift signifies an increase in sales in response to type of advertising or promotion. In other words, sales uplift implies sales over and above the normal/baseline sales during promotions at each retailer for each product. It is important to monitor, measure, and optimize sales uplift because it helps to for business growth quickly (Ramanathan, 2012).

2.2 In-store impulse buying behaviour

Buying behaviour has been of a great interest of scientists (Foubert, Breuglamans, Gedenk & Rolef, 2018; Sorensen, et al. 2017; Buil, de Chernatony, Montaner, 2011; Chang, 2009). In retailing of goods, impulse buying behaviour is relevant to both store retailers and manufacturers. Throughout the past 20 years, shopper marketing takes place more impactful for impulse buying shoppers (Fandos & Flavian, 2006). Simultaneously, numerous retailers invest lots of capitals on in-store marketing to inspire unplanned impulse buying (Bellini, Cardinali, & Grandi, 2017; Fandos & Flavian, 2006).

2.3 Sales Promotion

Over the last few decades, numerous academic papers emerged on the topic of sales promotions in academic fields such as: psychology, economics and marketing (Blattberg & Neslin, 1990; Bao, & Sheng, 2010; Blattberg & Briesch, 2010; Palazon & Delgado-Ballester, 2009). Promotions are intended for various determinations and various audience: consumers, retailers and trade. First,

trade promotions are targeted to the channel distributors and they aim at encouraging retailers to give promotions to their consumers. Next, retailer promotions are made from retailers, so to increase sales of a product or category of products. Thirdly, consumer promotions are directed to shoppers by producers and producers of the products. This thesis is focused on consumer sales promotions, namely price and nonprice sales promotions, which influence the shopper to make a purchase at a point in time. Sales promotion practices mass media and non-media marketing efforts (Blattberg & Briesch, 2010). Blattberg and Neslin (1990) gave a definition for sales promotion as: “an action-focused marketing event whose purpose is to have a direct impact on the behavior of the firm’s customer”.

Price promotion in shopper marketing means an element of the promotional mix of a business, they are temporary price cuts of a product. Some of the most commonly used techniques are the typical price promotions, i.e. deep discount deals (Ailawadi, Beauchamp, Donthu, Gauri, & Shankar, 2009). On the other hand, other companies also use nonprice promotions (store flyers, in-store displays, premiums) as their very strong stir for sales and revenues. Furthermore, FMCG firms’ sales promotion come at around 50% of total budget for marketing and approximately 13% of total revenue (Escalas, 2004).

Companies are also using actively nonprice promotions, wherein benefits are offered to shoppers except price discounts, Appendix 7 for Jumbo stores. Since nonprice promotions usually intend to attract the hedonic consumption or providing customers with an chance to try out newly invented products, permanent displays and premiums(gifts), they are the most common forms of non-price promotions (Ailawadi, Beauchamp, Donthu, Gauri, & Shankar, 2009; Escalas, 2004; Kivetz & Zheng, 2017; Jones, 2019).

H3: Nonprice promotions have bigger positive effect on sales uplift than price promotions.

With independent variable nonprice promotions.

2.4 Digitalization of promotions

In today’s digital world, media has been slowly replacing traditional advertising and marketing, due to acquaintance of computer technology that has growth the search for more effective and cost efficient methods in marketing communications (Rehman & Ibrahim, 2011). This transition,

has stimulated both non-price and price promotions to spread over retailers. And so mobile promotions via applications have become gradually prevalent in recent years (Park, Park, & Schweidel, 2018). Firms have been increasingly using customer marketing tools such as app. An app a digital tool on a mobile device, where message arrive, including promotions.

According to the Juniper Research organization in 2019 , around 1bn customers were predicted to use coupons via their mobile phones. In contrast, in 2014 this number was estimated about 560 million users (Smith, 2014). Unsurprisingly, the digital channel has developed and risen as an crucial mechanism for target grocery promotions.

Consumers and grocery shoppers regularly have their smart phones as an integral part of their daily lives and, usually, thus they are exhibited to many App promotions and this is not big struggle (Dickinger & Kleijnen, 2008; Park, Park, & Schweidel, 2018). The increased convenience of mobile promotions raise the awareness of promotion at a store quicker compared to traditional in store promotions. In this sense, it is expected that the efficiency of mobile promotions during the promotion period is bigger than offline promotions (Rehman & Ibrahim, 2011).

Retailers more and more start using technologies to the consumers. In contrast, there is a concern that some mobile users can be distracted by the numerous marketing promotional messages they receive and in the end not buy anything (Grewal, Ahlbom, Beitelspacher, Noble, & Nordfält, 2018). A study experiment conducted by Grewal, et. al. (2018), showed that looking at their mobile phones during shopping trips, customers spend more time at a store and this was accompanied by increased spending. Evidently, there are mixed results for apps at stores. However, in general futuristic technology is on the rise and perhaps one day will be invented a true way to attract most shoppers at a store (Noble, Roggeveen, Grewal, & Nordfalt, 2020) .

From the following section, this hypothesis is derived:

H2: App has a positive effect on sales uplift.

With independent variable is “ App”.

2.5 Brand communication

According to Ailawadi, Beauchamp, Donthu, Gauri, & Shankar (2009), the manufacturer's and retailer's perspective on communication and promotion differ. For example, the objective of a manufacturer are maximize the brand, company, category profits. Whereas, the goal of any retailer would be rather to maximize the store, category, chain, private label customer profits. Furthermore, the tools a manufacturer would use are: brand advertisements, consumer targeted promotion, sales force, public relations and trade promotion. On the other hand, from a retailer, the tools used can be: instore advertising, private label advertising, loyalty cards, coupons, public relations and feature advertising. So, this perspective is quite different amongst manufacturers and retailers.

Moreover, Aghkeyan-Simonian et al. (2012) state that perceptions of product attributes are impacted by a product brand image. This implies that shoppers' evaluation of a product's characteristics might be influenced by their impression of one brand's image over another brand. Thus, if a promising and robust brand is on the shopper floor at a store, this brand would lead to a positive impression. This in turn results in more awareness of a brand and a product and on the buying behavior of shoppers as well, stimulating more purchases. As a result having a widespread and loved brand, increases the chances of eventual purchase activity amongst shoppers.

Brand communication could be an important player in the acceptance of products (Kemp & Bui, 2015). Moreover, as Bao, Bao & Sheng (2010) stated, national brands are brands that are made, developed from manufacturers, with is the case of Chocomel and Fristi of FrieslandCampina, because they are produced by the company itself. On the other hand, quality perception of brands is considered highly important for shoppers and market shares, dictating shopper's purchase intention. The shoppers purchase probability is an implied potential of shoppers to buy the product again when they go to the retailer on their next shopping trip (Bao & Sheng, 2010; Tariq, Nawaz, & Butt, 2013). The Chocomel and Fristi drinks at FC can be either fresh or ambient, which is the communication claim on their packages. Ambient milk refers to milk that does not need to be cooled down in a fridge at a store, but it stays on shelves in a room temperature whereas fresh milk is held in fridges up to 7° (Greenwood, 2017). For Fc it is more important to market freshness of its milk, because nutrients are more preserved and in general according to

the company, Dutch consumers seek buy more fresh milk products than ambient milk ones (FrieslandCampina, 2019).

To sum up, communicating that a product is fresh, is very important role in branding and influencing decisions of shoppers, who strive for healthier choices thus might influence sales uplift eventually. Therefore, the following hypothesis was formed:

H1: Communication in a promotion has a positive effect on sales uplift.

With independent variable “Communication”.

Following the Theory chapter of this thesis, the following conceptual framework will be examined in this deductive study and below all three hypothesis of interest:

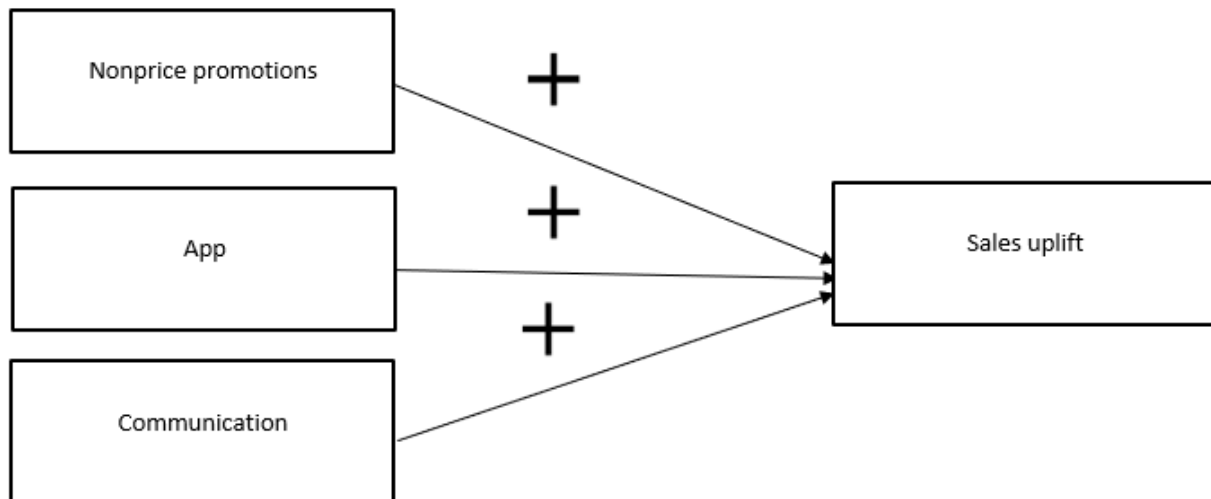


Fig1. Conceptual framework model

Chapter 3. Methodology

This chapter will give an explanation of the methods used in this research. Starting from an operationalization of the variables in this study. Next, how validity and reliability will be ensured.

The sample size account for 160 observations in Jumbo stores for Twente region from week 1 to week 30 in 2019, when promotions were implemented. The unit of analysis are Jumbo stores in Twente region.

3.1 Operationalization and measurement

The Variables and Operationalization table is given below:

TABLE 1

Variables and Operationalization

Variable	Operationalization
X: Nonprice	Nonprice promotions(1) used in Jumbo stores are: in-store permanent displays, premiums) so they do not have the price reduction concept. Price promotion(0) used at Jumbo stores for Chocomel and Fristi are: discount and BOGOF(buy one get one free).
X: App	An App (1) is when a promotion was done via the Jumbo grocery app. Offline(0) is when a promotion was offline - done at Jumbo stores.
X: Communication	Fresh(1) is a dairy drink held in cooling temperature in fridge in stores. Ambient (0) is a dairy drink held in room temperature.
Y: Sales uplift	Sales uplift (ratio) is the sales % FC gets above the baseline sales during promotion weeks at Jumbo stores in Twente region. Sales lift for Chocomel and Fristi during from W1-W30 in 2019 is calculated taking in account actual sales for the two brands and baseline sales.

The target group of this research is dairy Jumbo shoppers in Twente region. The products that data had been collected for are Chocomel and Fristi (App.5, App.6). Twente region is located in the Easternmost part of the Netherlands. It is the most populated part of Overijssel province. Main cities that fall in this region are: Almelo, Hengelo and Enschede. Other towns are: Haaksbergen, Losser, Oldenzaal, Rijssen, Wierden.

3.2 Validity and Reliability

With assessing the degree of measurement error present in any measure, any researcher should notice two vital characteristics of a measure: validity and reliability (Hair, Black, Babin, & Anderson, 2014). This sub-section will take into account the reliability and the validity of the actual paper as those two components are crucial for the credibility of research and taking in mind important quality measures of quantitative research (Babbie, 2016; Kumar, 2019).

3.3 Validity

Validity in this thesis will be achieved via several ways. Firstly, this research aims to be as unbiased as possible and objective so that it is applicable to the research question and hypotheses. By applying this, accuracy will be granted. Secondly, for inter validity, this research will be performed for the Global Customer Development team in Amersfoort and the data collection will be from the Jumbo team via the data collected using their expert tool 7even software. Lastly, for pragmatic validity, using data taken from real life business conditions, significantly increases the validity of this thesis. The sample size is also important to consider. Sample size has the effect of increasing statistical power by reducing sampling error (Hair, Black, Babin, & Anderson, 2014). The sample size for testing the three independent variables and sales uplift account for 160 entries of study in Jumbo stores for Twente region from week 1 to week 30 throughout 2019, when promotions were implemented.

3.4 Reliability

In this thesis another criterion for assessing credibility is reliability (Babbie, 2016). This reliability refers to the consistency of the measures into the quality of a measurement procedure in this study and which provides repeatability and accuracy (Kumar, 2019; Bell, Bryman, & Harley, 2018). In other words, the results are independent from the author of this thesis. This means that the data is replicable and the same results would be achieved if reanalysed. This data consists of all sales uplift for two brands: Chocomel and Fristi dairy drinks from FrieslandCampina that were sold in Jumbo stores in Twente. Also, data includes weeks of price promotions and nonprice promotion that were implemented. After seeing the results, the effectiveness of price and nonprice promotions will be known and what was the effect of Jumbo app in relation to sales uplift for the given timeframe and lastly, how the brands communication affected sales uplift.

3.5 Research design

This study will use linear regression as the most appropriate method, because we deal with dependent variable that is continuous (sales uplift) and three independent variables (nonprice promotions, app, communication), refer to Appendix 8 for overview of regression models.

Linear regression

The following equation shows a multiple linear regression equation. The equation is conceptually similar to the simple regression equation, except for parameters β_2 through β_3 , which represent the three independent variables in this study (Montgomery, Peck, & Vining, 2012):

$$\text{Sales uplift} = \beta_0 + \beta_1 \text{nonprice} + \beta_2 \text{app} + \beta_3 \text{communication} + \text{error}$$

from which:

Y is dependent variable- sales uplift

$\beta_0, \beta_1, \beta_2, \beta_3$ are coefficients that estimate the maximum likelihood method based on the data.

x_1, x_2, x_3 independent variables, representing: “nonprice promotion”, “app” and “communication fresh”, respectively.

$$R^2 = \frac{SCE_p}{SCE_{tot}}$$

Chapter 4. Results

This chapter will show the main results of the data analysis conducted. Results are based upon the SPSS analysis of the data via a results table for more clarity and visibility. The SPSS outputs that are of most interest in analyzing this thesis are the: Descriptive Statistics table and the Coefficients table. In addition for more visualization, the histogram and the Normal P-P plot of Regression can be observed.

TABLE 2
Descriptive Statistics

	N	Mean	Std. Deviation
Nonprice	160	.34	.476
App	160	.60	.491
Communication	160	.30	.460
Sales Uplift	160	.5213	.48148

The Descriptive statistics show us that the number of observations is 160. The average sales uplift that can be expected is .5213%, or around 52% rounded. The mean for Nonprice predictor is .34; the App mean is .60 and the Communication mean is .30. Therefore, standard deviation is the square root of the variance meaning it measures the spread of the observations. The larger the standard deviation is, the more spread out the observations are, so in this study for variable App the observations are most spread, in contrast for the Communication variable that are least spread out.

TABLE 3*
Coefficients

Variables	Estimates		
	Unstandardized Coefficients	Standard error	Significance
(Constant)	.524	.085	.000
Nonprice	.166	.094	.082 *
App	-.114	.084	.176
Communication	.031	.093	.744

*Dependent variable : Sales Uplift

Firstly, from the Model Summary table the R^2 was examined. In this study it was calculated that the R^2 is .050. This implies that the amount of variance deviation of sales lift is .050 explained by Communication fresh, Mechanism App and Nonprice promotions.

Secondly, taking the coefficients table results into consideration we can say some things for our variables and relationships. The B unstandardized coefficients show number of units sales uplift increases for 1 unit increase in every predictor (Montgomery, Peck, & Vining, 2012). Therefore, 1 point increase on Nonprice promotion accounts for .166 increase on the sales uplift. This is a positive relationship with a significance level of .082 *. Next, interestingly 1 point increase on App corresponds to -.114 decrease on the sales uplift. This is a negative relationship with a significance level of .166. Thirdly, 1 rise on Communication correlates to .031 points increase on sales uplift. This relationship is a positive relationship and significance level of .684.

The “Significance” grasps the p-values for all three predictors of this study. Usually, a B coefficient is statistically significant if it’s $p < 0.05$ or $p < 0.10$ (Babbie, 2016). The results show that Nonprice coefficient has a significant power of .082 *. Next, App coefficient has a power of .176, which is not significant. Thirdly, Communication coefficient significant power is .744, which is not significant.

Further on, the visuals of this analysis can tell us some insights as well. For instance the histogram performed shows that the histogram of the data in this thesis contains 160 observations, which holds same number on Fig 2 Histogram. This implies that there are no missing values in the analysis. Further on, the distribution is skewed to the right, because we see the tail is on the right side.

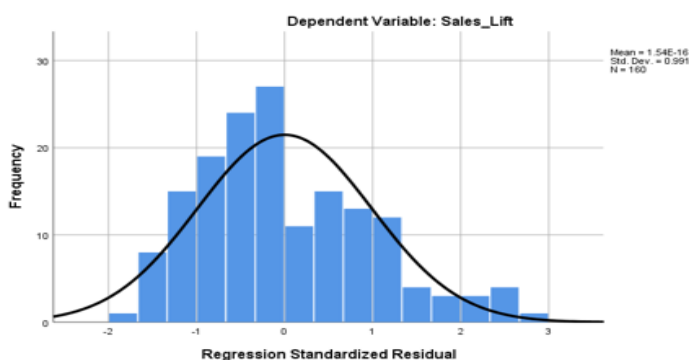


Fig 2 Histogram

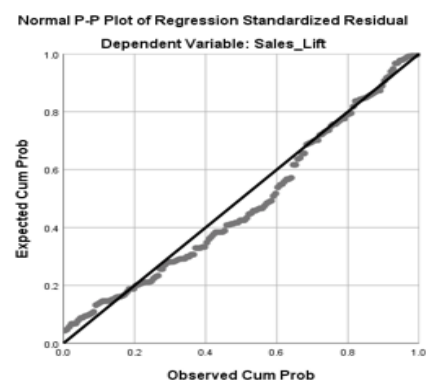


Fig 3 Normal P-P plot of Regression

When it comes to the Normal Probability P Plot for a regression, it is used in regression to identify whether particular variables are normally distributed in a graphical manner. In Fig. 3 is given the Normal Probability P Plot for a regression model for this research. We observe a generally normal model, where residuals fall on the line and with some deviation towards the center.

Chapter 5. Discussion

This research demonstrates a positive correlation between Nonprice promotions, communication and sales uplift. Furthermore, the analysis confirms that in the case of FrieslandCampina, the app has a negative correlation with sales uplift of Chocomel and Fristi. These results matter because FC should know where to concentrate marketing efforts for spreading awareness and increasing sales for their two brands. The expectations of this research in relation to the three hypotheses were two fold. On the one hand two hypotheses can be confirmed H1 and H3. For H2 we have to reject. As literature proposed nonprice promotions play a big role in increasing tremendously the sales, with this research we confirmed that there is a clear significant positive relationship between nonprice promotions (permanent displays and premiums) at Jumbo stores in Twente. Next, in line with the literature, Communication has also a positive contribution to more sales. In this thesis it was proven that communication efforts of FC were affecting the sales uplift in a positive way. And despite that this relationship was not significant, it is crucial to note that Chocomel and Fristi can benefit of a clear claims on the packages, highly visible to shoppers who seek fresh products in Twente region. Lastly, using Jumbo app for the Twente region has proven to have a slightly negative relationship to sales uplift. As the literature for this showed that reason could be some shoppers might be even distracted by their smart phones while shopping, so they could spend more time in the shop, nevertheless shopping less when they are bombarded with app promotions. This is interesting because in general apps help a lot in marketing and targeting shoppers to buy certain products on a promotion.

The limitations of this study are that perhaps a bigger number of sample could be attained for the future, for example for a whole year, instead of half year. However, it should be noted that

the researcher of this thesis had only one academic year and the data provided was restricted only to the period of the internship, which was 6 months.

Chapter 6. Recommendations and Conclusion

Recommendations for FC are to investigate and implement the usage of digital panels and screens in Jumbo stores. They are also more eco-friendly than permanent paper displays, thus will tremendously reduce paper waste. This is in line with the strategy of FrieslandCampina they involve a great deal in sustainability. Moreover, for achieving bigger sales uplift use more nonprice promotions instead of price promotions because the first are more effective. For FrieslandCampina the permanent displays and premiums are pivotal tools for achieving sales uplift. Further on, they could add other means of nonprice promotions for example sampling of Fristi and Chocomel during promotional weeks.

Recommendations for further research would be to have a bigger sample, so that the entire year is investigated. In addition, other recommendation for further research is to complement with an eye tracking device, so to see how long shoppers spend on Apps on their phones and how long on other irrelevant things. In this way, the duration of visibility will be known for promotions.

To conclude, this research aimed to identify the effectiveness of price and non-price promotions on sales uplift in the context of dairy drink shoppers at Jumbo stores in Twente region, the Netherlands in 2019. In summary the answer of this question is that there is a significant positive effect of nonprice promotions on sales uplift and this effect is bigger than price promotions. The Jumbo dairy shoppers in Twente are influenced by the Jumbo app for promotions in a not so positive way. They rather spend less after seeing a promotion of Chocomel and Fristi on their mobile, it was assumed that they could be spending more time on other irrelevant phone activities. Next, for them it is important to know the claim tag on the packages of Chocomel and Fristi as the results explicitly demonstrated that the communication whether the drink is fresh or ambient has positive effect on sales uplift. Referring back to the literature sources of this thesis the gap was minimized by using actual real retailer data; more knowledge of the sales uplift has been brought to readers and last but not least this thesis confirmed the assumptions that

nonprice promotions and communication are pillars to think about in a company's marketing strategy.

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Appendixes

Appendix 1 Activations all In-store Sales Promotions at FrieslandCampina for all brands

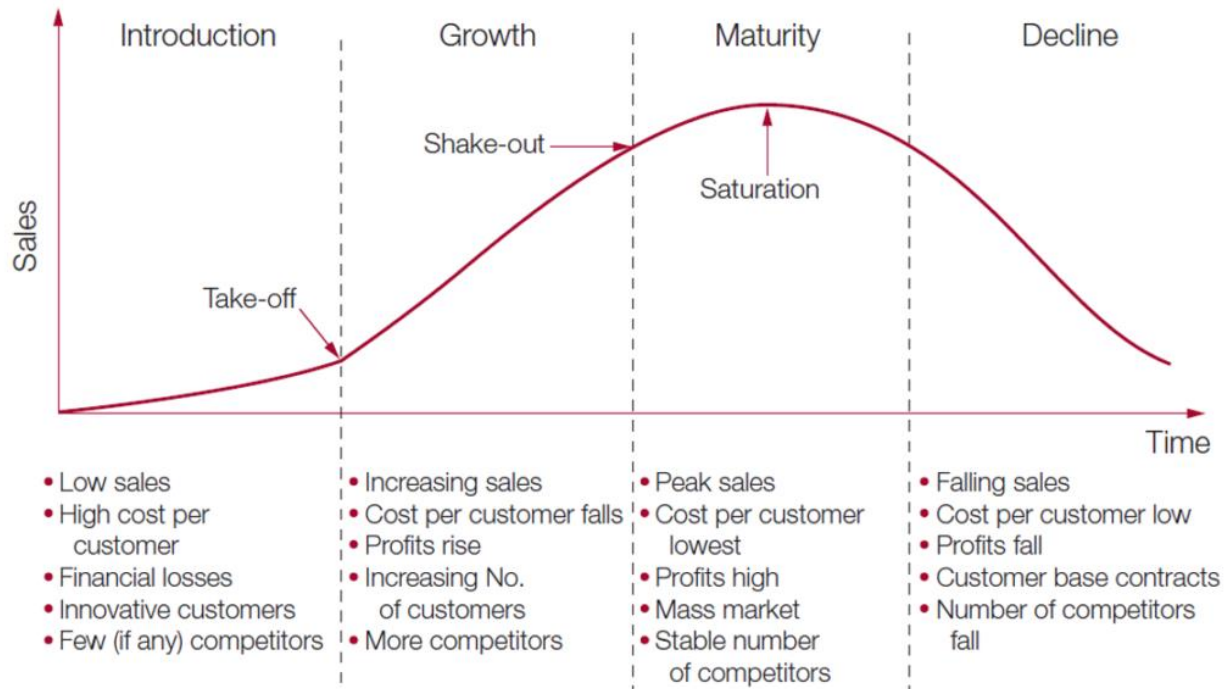
(FrieslandCampina, frieslandcampina.com, 2019)

	# of stores	# of weeks	Uplift	Cost per store
Coolerplan	135	2-4	10-15%	€55
Coolio	50-150	2+	15-20%	€300
Coolbooster	30-50	1-4	20-25%	€450
POS shelf	240	1	awareness	€25
AMS	550	4	awareness	€77
AMMG	850	1-2	awareness	€44
Win Deal	50+	1-2	20-40%	€150
Tasting	50-100	2 days	65-90%	€725
Experience	50-100	1 days	65-90%	€1000
Premium	150+	1-2	20-25%	€200-€300
RAD display	100+	1	15-20%	€150
Bulk display	50+	1	15-20%	€100-200

Appendix 2 Price promotions and non-price promotions real life examples

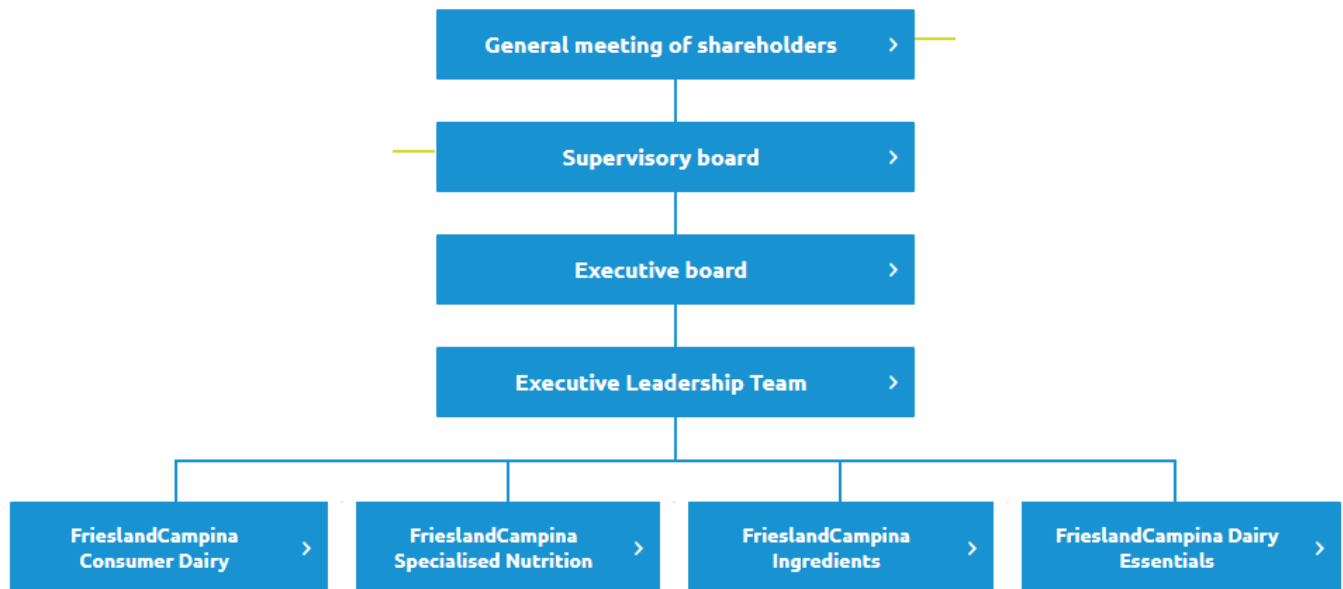
Price Promotion	Non-price promotion
<p data-bbox="203 373 324 405">Discount</p>  <p data-bbox="272 709 394 772">Chocomel 1 liter en 3-packs Alle varianten Per pak of set</p> <p data-bbox="410 699 483 772">1.28 - 1.35 1.00</p>	<p data-bbox="828 373 1071 405">Permanent display</p> 
<p data-bbox="203 919 300 951">BOGOF</p> <div data-bbox="215 1014 508 1287">  <p data-bbox="248 1203 313 1255">1+1 GRATIS</p> </div> <p data-bbox="248 1350 467 1392">Fristi Rood Fruit 0% Suiker Toegevoegd 1L</p> <div data-bbox="540 1014 800 1287">  <p data-bbox="573 1203 638 1255">1+1 GRATIS</p> </div> <p data-bbox="605 1350 776 1392">Chocomel 0% Suiker Toegevoegd 1L</p>	<p data-bbox="828 919 1015 951">Premium(gift)</p> <div data-bbox="833 961 1430 1234">   </div> <div data-bbox="963 1266 1279 1507">  </div>

Appendix 3 The four Life Cycle Stages and their Marketing Implications



Appendix 4 Organogram

Organogram (FrieslandCampina, frieslandcampina.com, 2019)



Appendix 5 Fristi Rode Fruit product specifications (FrieslandCampina, 2019)

FRISTI ROOD FRUIT

Fristi Rood Fruit smaakt naar heerlijk zoete aardbeien, frambozen en kersen.

Ingrediënten: Magere gefermenteerde melk, vloeibare melkbestanddelen (weipermeaat), water, vruchtensap uit geconcentreerd sap 3% (1% aardbei, 1% framboos, 1% kers), suiker, fructosestroop, stabilisatoren: pectine, guar gom, dikaliumfosfaat en trisodiumcitraat, voedingszuur: melkzuur, aroma, kleurstof: karmijn.

GEMIDDELTE VOEDINGSWAARDE PER 100 ML

Energie	184 kJ (43 kcal)
Vet	0,0 g
waarvan verzadigd vet	0,0 g
Koolhydraten	8,0 g
waarvan suikers	7,9 g
Eiwit	1,8 g
Zout	0,12 g
Calcium	70 mg (9%)*



* Percentage van de dagelijkse behoefte.
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Appendix 6 Chocomel product specifications
(FrieslandCampina, Chocomel, 2019)



NUTRITIONAL VALUES

	PER 100ML	200ML PER SERVING
ENERGY	364	728 kJ / 174 kcal (9% RI **)
FAT	2.7	5.4 g (8% RI)
OF WHICH SATURATED	1.9	3.8 g (19% RI)
CARBOHYDRATES	12.0	24.0 g (9% RI)
OF WHICH SUGARS	11.8	23.6 g (26% RI)
PROTEIN	3.2	6.3 g (13% RI)
SALT	0.13	0.27 g (4% RI)
CALCIUM	100 mg (13% DRI **)	200 mg (26% DRI)

*: Reference intake of an average adult (8400 kJ / 2000 kcal)
**: Daily reference intake

Appendix 7 Example of discount promotion of Chocomel in Jumbo
(Jumbo, 2019)



Appendix 8 Regression models review

(Schneider, Hommel, & Blettner, 2010)

Table 1

Regression models

	Application	Dependent variables	Independent variables
Linear regression	Description of a linear relationship	Continuous(weight, blood pressure)	Continuous and/or categorical
Logistic regression	Prediction of the probability of belonging to groups (outcome: yes/no)	Dichotomous(success of treatment: yes/no)	
Proportional hazard regression (Cox regression)	Modeling of survival data	Survival time (time from diagnosis to event)	
Poisson regression	Modeling of counting processes	Counting data: whole numbers representing events in temporal sequence (e.g., the number of times a woman gave birth over a certain period of time)	