## Stockholm School of Economics

Master thesis - Marketing and Media Management

# Attitude vs Action 

## The predictability of attitudinal estimation models on purchasing behaviour

Understanding consumer behaviour has become increasingly important for decision makers. As a result, tracking data to assess consumer attitude, intention and loyalty is growing in popularity. While survey based insights provide knowledge about intended and probable behaviour, this approach does not have full descriptive power for actual behaviour. Attitudinal estimation models aimed to describe purchasing behaviour have emerged. These models, however, are influenced by exogenous factors in the form of measurement errors and systematic biases, leading to discrepancies between attitude and action.
This thesis tests the discrepancy by comparing attitude and action. This is achieved by defining customer share of wallet from the Wallet Allocation Rule and putting this measure in relation to reported purchases for the same customers. To determine what exogenous factors influence the behaviour, both pre-purchase estimates, in the form of purchase intention, and post-purchase estimates, in the form of loyalty scores, are applied.
The results show a clear mean difference between attitude and action in all investigated product groups. In addition, it is emphasised how pre-purchase estimates are influenced by economic and in-store variables, such as price, availability and promotional offers. On the same note, post-purchase estimates are influenced by the quality of the product and by cognitive factors, such as brand recognition, preference and trust. These insights are complemented with category specific influencers to provide managers with knowledge on how to increase wallet share, at an individual level, and market share, at an aggregate level.

Keywords: Consumer Behaviour, Consumer tracking, Purchase intention, Share of Wallet, Wallet Allocation Rule, Loyalty

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Presentation: 2014-06-02

## A special thanks to

Anna Nyberg, for being our tutor and providing guidance throughout the process Magnus Söderlund for the research insights

Fredrik Lange for the thoughts about the subject and overall support

Everyone at Nepa AB for the research support and data, especially:
Felix Bergström for his expertise in survey design and data guidance
Ali Piltan for inspiration and guiding thoughts
and everyone else who supported us throughout the process

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## 1. Introduction

In order to assess market performance, the use of brand tracking to understand customer behaviour has become increasingly important for companies. Understanding customer behaviour can, on an aggregated level, result in insight on market shares and, on an individual level, result in insights on wallet share. Based on tracking data, customer insights in the form of loyalty measures and purchase intentions can be achieved, enabling companies to keep track of their brand value and market position on an ongoing basis. As important as loyalty and intentions are, what really matters for company performance are the actual sales figures. Methods for using loyalty measures and brand tracking as proxy variables for sales have emerged, leading to a number of complex models with more or less reliable results.

The popular estimation models focus on pre-consumption metrics, such as top-of-mind and consideration set, and post-consumption metrics, such as loyalty. The accuracy of these models in predicting purchases from consumers with a positive mind-set will be investigated. This will deliver insights to how tracking data can best be applied to estimate behaviour and how the different estimation models are influenced by market factors.

### 1.1 Research Background

Research focusing on behaviour has mainly emerged within social science (Ajzen, Fishbein 1975, Howard, Sheth 1969). The predictability of consumer behaviour in a purchasing environment, on the other hand, has emerged in recent years with theories about loyalty, intentions and behavioural estimation models based on survey responses (Bongers et al. 2007, Keiningham et al. 2011, Aksoy 2013).

Work in this area has attempted to improve the reliability of intentional purchasing estimates, aimed towards accurately predicting behaviour (Wright, Macrae 2007). Young et al (1998) states that intentions almost always provide inaccurate measures, either overestimating or underestimating the predictability of intended behaviour. It is, however, proven that intentional measures, when included in the estimation model, increase the predictability of that model (Armstrong, Morwitz \& Kumar 2000).

The discrepancy between intention and action has been explained by the presence of externalities and switching barriers, leading to less predictability in estimation models based on consumer surveys (Bagozzi, Warshaw 1990). What customers say they do therefore tend to differ from what they actually do. The discrepancy between attitude and behaviour is influenced by measurement errors, where time from reported attitude to purchase can change the outcome, and systematic biases caused by product characteristics and respondent mind-set (Young, DeSarbo \& Morwitz 1998).

Though the research on consumer behaviour is extensive, the research methods for companies to track actual behaviour is lacking. The current tracking methods, with ongoing surveys, measure consumer perception, attitude and intentions, leaving actual behaviour to estimation models (Aksoy 2013). Proxys such as loyalty and purchase intentions are used in order to make behaviour more tangible, but are not always representable for actual purchasing behaviour due to the mentioned external influencers (Young, DeSarbo \& Morwitz 1998).

While focus within research for behavioural estimations has been on intention and probability of purchase, attitudinal estimation models have yet to be tested in relation to behaviour. These models, with attitudes at their core, are based on cognitive metrics for brand loyalty and preference (Aksoy 2013, Brennan, Esslemont 1994). Thus, there are enough published models and theories for further comparison of the relative performance and errors in estimates for behaviour.

### 1.2 Research Gap

To properly track customer behaviour and sales, detailed data with access to the same customers and their purchasing patterns over a time period is required. Though this would result in more reliable data with a stronger connection to the actual sales and, hence, market performance, the cost and effort for obtaining such in-depth data is high (Wright, MacRae 2007). Companies can easily obtain attitudinal and intentional data for their brands, but have no clear strategy or way to obtain purchasing data that measure actual behaviour.

There are two types of measurement deficiencies when it comes to the attitude-behaviour relationship: a lack of tracking data or a lack of purchasing data. As most store chains offer loyalty cards for their customers, tracking their actual purchases can be done in a simple manner.

Unfortunately, these companies do not track brand specific attitudes and the relationship between attitude and behaviour is therefore lost. The other deficiency occurs as companies track consumer attitude but do not have access to actual purchasing data for the same customers. There is, hence, a gap in the marketing literature and practice. This gap represents connecting attitudes to behaviour by measuring actual purchasing behaviour and connecting this to attitudinal estimation models for behaviour.

The discrepancy between attitude, intention and action has been explained by introducing externalities. In the Fast Moving Consumer Goods (FMCG) categories, these externalities differ between product categories and depending on the characteristics of the purchase. Another gap in the research is therefore to assess differences in the behavioural estimation models based on tracking data and the actual behaviour, depending on the nature of the product category.

### 1.3 Purpose

Based on the previously introduced research gap, the purpose of this thesis is to determine if models for estimating purchase behaviour actually correspond to the action of purchasing, or in more direct terms: to determine how attitude and action relate to each other. This will be achieved through the use of commonly applied brand tracking data and loyalty measures subtracted from this. These numbers will be put in relation to actual reported purchasing data focusing on consumer behaviour in order to assess how brand tracking data links to actual market shares. The relationship between attitude and action will thereafter be analysed further, with the application of intentional and loyalty metrics, to determine what influences the relationship in different product categories as well as how customers can be influenced to achieve a higher sales number.

Based on this, the thesis aims to establish if marketers can rely on attitudinal estimations of behaviour. The objectives are: 1) to identify the mean difference in attitudinal models and actual behaviour, 2) to develop category specific insights, and 3) to present influencing variables that affect the connection between consumer tracking and behaviour.

### 1.4 Research contribution

The thesis contributes both to the academic and the managerial world. The academic contribution is the closing of the gap between two ways of retrieving data, namely consumer surveys and
sales data. Further contribution lies in the determination of factors that influence the behavioural estimation models within different types of product categories. Through this, frameworks for analysing the attitude-behaviour relationship within differently characterised product categories are also presented.

Furthermore, the analytical framework provides managers with insights to how the attitude, purchase intention and loyalty of their consumers actually are translated into purchases and presents factors that influence the differences, depending on the product category in which they are active. Finally, knowledge is provided on how to increase sales through an increase in share-of-wallet. These findings are relevant to managers, market researchers and marketers with a general interest in understanding customers.

### 1.5 Definitions

- Cognitive factors: Factors that influence consumer behaviour from an emotional and experience based level.
- Economic factors: Factors that influence consumer behaviour from a rational and economically beneficial point of view.
- Hedonistic purchase: Consumption aimed to seek amusement, fun, arousal, indulgence and enjoyment.
- In-store factors: Factors that influence the intended consumer behaviour in-store.
- Impulse purchase: Purchases that are unplanned, where the demand recognition occurs in-store, in close relation to the actual purchase.
- Juster scale: A measurement developed to define intention to purchases.
- Planned purchase: Purchases that have been decided upon prior to entering the store.
- Share of wallet: A measurement for helping managers to understand the amount of business a company gets from a specific consumer.
- Tracking data: Companies track their brands overtime through continuous surveys related to the brand itself, competition and market forces.
- Utilitarian purchase: Consumption aimed to fulfil a basic need. This type of purchase focuses on tangible benefits for conventionally purchased products.


### 1.6 Delimitations

The study is limited to FMCG markets as the purchasing frequency is higher than markets for other types of goods, such as financial and durable goods. Four product categories will be analysed, but are chosen from category defining variables, thus the generalizability for other categories is upheld.

Due to time constraints, the study is limited to five weeks, resulting in five survey responses from each respondent.

In this thesis, the respondents are limited to the Swedish market. The study is therefore conducted in Swedish to properly convey the purpose of each question and to uphold the quality of answers.

### 1.7 Disposition

The thesis is divided into the following seven main parts: The first part has so far introduced the topic, problem area and the resulting research gap. In addition, the purpose of the thesis and the research contribution have been defined.

The second part introduces relevant theory for the research area. The theory focuses on existing behavioural theories, product group characteristics, commonly used customer tracking metrics and methods to measure Share of Wallet. As a result, the hypotheses for the study are defined.

Part three describes the methodological approach for the study, further describing the choice of subject, approach and experiment design.

The forth part presents the results, followed by part five where the research is analysed in relation to the presented theory.

Part six discusses the outcomes and implications of the analysed material with focus on the purpose of the thesis, while the last part concludes.

## 2. Theory

The following section will introduce commonly applied theories for consumer behaviour, product characteristics that influence behaviour and factors that are measured in surveys to estimate consumer behaviour. The notion of Share of Wallet will be clarified, followed by the introduction of Share of Wallet estimation models.

### 2.1 Consumer behaviour

Within recent years, it has become increasingly important to understand consumers and obtaining data that aims to do this has become increasingly easy. More and more companies approach this issue through continuous and standardised surveys that aim to assess customer perceptions through brand ranking. This continuous assessment is known as 'tracking data'. Though this is a good approach to understand perception and intention, the actual purchasing behaviour is not captured. To solve this issue, many authors have developed models on how to use attitudinal data as a proxy for behaviour and action in-store (Ajzen, Czasch \& Flood 2009, Ajzen 1991, Ittner, Larcker 2003).

Consumer behaviour is generally considered, through a cognitive approach, as consumer choice based on problem-solving, information seeking and decision-making. It is dependent upon the consumer's ability to handle a lot of information from different sources and interpret exogenous factors in relation to their decision (Foxall 1991). Choice is, hence, portrayed as a mental model for a consumer's ability to merge information and develop preferences.

Two types of approaches to explaining consumer behaviour will hereafter be outlined: the cognitive/rational approach and the humanistic approach (See Figure 1). These models are relevant for all FMCG industries as they provide frameworks for understanding behaviour both prior to entering the store and in-store.

Figure 1: Consumer Behaviour Models


### 2.1.1 Cognitive/Rational approach

The cognitive models rely on the assumption that the consumer is a rational decision maker, i.e the economic man (Foxall 1991). Two types of cognitive models are highlighted in the modern literature: analytical and prescriptive models. Whereas the analytical models describe key elements of consumer behaviour and consumer decision making, the prescriptive models describe the causal relationship between factors that influence consumer behaviour. As such, the latter are developed as predictive models for what stimuli should be modified in order to influence the outcome.

### 2.1.1.1 Analytical Cognitive/Rational models

The two most well-known analytical models are the Consumer Decision Model (Bray 2008) and the Theory of Buyer Behaviour (Howard, Sheth 1969). These will each be described in part in order to assess the influence of consumer intention and consumer perception upon actual purchasing behaviour.

Figure 2: The Consumer Decision Model


Source: (Howard, Sheth 1969)
The consumer decision model is characterised by five stages: starting with problem recognition, information search, evaluation of alternatives, purchase decision and post-purchase behaviour (See Figure 2). This model implies that the planning phase of each buyer decision has an impact on the actual act of purchase. The consumer decision model allows its users to assess how intentions are shaped by memories of previous experiences and that the purchase decision is influenced by external variables such as environmental influencers or differences in individual purchasing capability. The environmental factors include: culture, social class, family and situation. The individual factors include: preferences, attitudes, knowledge, customer resources, personality and lifestyle (See Appendix 1). (Howard, Sheth 1969)

The depth of the information search within this model will differ tremendously depending on the product category where the purchasing process for high involvement products requires active information search and the process for low involvement products requires limited information search. The fact that the purchase is evaluated after consumption adds to the external influencers as it builds new experiences and connections to the brand purchased. Most FMCG will therefore not have the same extensive decision model as products that require planning in the decision process.

The theory of buyer behaviour focuses on the internalised consumer stimuli, external variables, and the combined effect of these, denoted in the model as 'output', on the purchase decision (See Figure 3). The main components in the model are, similar to the consumer decision model, the information processing and individual influencers.

Figure 3: The Theory of Buyer Behaviour


The individual stimuli presented are: the significative stimuli, the social stimuli and the symbolic stimuli (Howard, Sheth 1969). The significative stimuli are the actual product elements and brands that are in the buyer consideration set, while the social stimuli is defined as the influence of peer groups such as family or friends. The latter, symbolic stimuli, is the brand image as constructed by marketers and is an indirect influence on consumer's purchasing decision (Ibid.). These are considered to influence the information search and sensitivity to that information.

The main outcomes from this model are the actual outputs from all exogenous and individual influencers: attention, comprehension, attitudes, intention and purchase behaviour (See Appendix 2). It is also suggested that consumer decision making is dependent upon the strength of attitude towards the different brands in their consideration set (Howard, Sheth 1969). In situations where the consumer does not have strong preferences towards any brand they are considered to engage in Extended Problem-Solving (EPS). This means that they have a longer information-search and actively seek information about brands within the product category to gain knowledge and form an opinion and preferences. In cases where the consumers are knowledgeable about the product category and the brands within in, they spend less time searching for new information and become less influenced by exogenous influencers such as advertising. This leads to them engaging in Limited Problem Solving (LPS). As purchases become more of a routine, more of the steps in the theory of buying behaviour are irrelevant, leading to the customers engaging in Routine Problem Solving (RPS). (Foxall 1991)

Based on these two analytical models, buyers are considered to have different purchasing behaviour within different product categories and based on their difference in stimuli and
information search. The models also show how attitudes, perceptions and intentions influence actual consumer behaviour.

### 2.1.1.2 Prescriptive Cognitive/Rational models

The two most commonly used prescriptive models are the Theory of Reasoned Action (TRA) (Ajzen, Fishbein 1975) and the Theory of Planned Behaviour (TPB) (Ajzen 1991). These models are developed to assess the causal relationship between intentions and behaviour and will be described in part below.

The Theory of Reasoned Action proposes that the individual's attitude towards the purchase and subjective norms can show how the behavioural intention and actual behaviour is approximately equal (See Figure 4). The subjective norm is derived from the thoughts of others upon a certain purchase behaviour and if the consumer in question follows these norms. It is proven how eye-catching purchases will be influenced to a greater extent by subjective norms (Bray 2008).

The measurement of behaviour is influenced to a higher extent by intentions and only indirectly through attitudes. The TRA shows how consumers can have a favourable attitude towards a brand but not towards actually purchasing it (Ajzen, Fishbein 1975). The attitude is therefore seen as influencing the intention, which in turn influences the actual purchasing behaviour (See Figure 4).

Figure 4: The Theory of Reasoned Action


Source: (Ajzen, Fishbein 1975)
While the TRA focuses on expectations of others and attitudes towards the purchase, later literature have highlighted how consumer behaviour is not solemnly within the buyers control but can be hindered by external factors (Ajzen 1991). The Theory of Planned Behaviour
includes this insight and covers factors that are outside of the buyer's control through including "Perceived Behavioural Control" (See Figure 5). Purchase barriers, namely factors that hinder the actual purchase behaviour, are outside of the buyer's control but play an important part in carrying out the purchase action.

Tracking data checks the intention to purchase, with the assumption that decisions made before entering the store are valid. Since research has shown that most decisions are made in-store, other factors such as promotions, bundle offers, availability, etcetera have a high influential power on actual behaviour (Nordfält 2007). The perceived behavioural control and the intention to purchase FMCGs are, hence, influenced by factors in-store.

Figure 5: The Theory of Planned Behaviour


Source: (Bray 2008)
For low-involvement products, Bruin et al (2004) showed how attitudes were only developed through cognitive routes to a small extent. When purchasing such products, the consumer's thoughts and feelings towards the brand is more connected to the conveyed brand image, brand personality and emotions (ibid). To properly understand consumer behaviour, emotions towards brands and purchasing decisions have to be considered. Therefore, the humanistic approach to consumer behaviour will be further explained.

### 2.1.2 Humanistic approach

While the cognitive approaches to understanding consumer behaviour assess the theoretical and generic purchasing processes, the humanistic approach looks into the same process but from an
emotional perspective with focus on the individual consumer. Two generally applied models are the Theory of Trying (Bagozzi, Warshaw 1990) and the Model of Goal Directed Behaviour (Bagozzi, Perugini 2001).

The Theory of Trying looks into the notion of trying to act rather than the act itself. The purchase barriers and expected success of trying to purchase are factors that influence the actual purchase (See Figure 6 and Appendix 3). The model does, however, not focus on purchase behaviour nor how this is affected through the intention to act.

Figure 6: The Theory of Trying

## Attitudes toward success



Source: (Bagozzi, Warshaw 1990)
The Model of Goal Directed Behaviour is adapted from the Theory of Planned Behaviour but factors that are introduced are the frequency and recency of past, similar behaviour as well as positive and negative emotions towards the behaviour (Bagozzi, Perugini 2001). The model provides a causal relationship from desire to purchase, to intention to purchase, to actual purchase, a causal relationship that is influenced by the external factors introduced in the Theory of Planned Behaviour (See Appendix 4).

The discussed models describe how consumers behave from a theoretical viewpoint. This view will be complemented with different purchasing characteristics that influence the consumer decision process. These characteristics will be introduced below.

### 2.2 Product Category Characteristics

Purchasing behaviour is different depending on the characteristics of the product category purchased. The most commonly mentioned variables within this area are the level of visibility of
the purchase, what type of need is fulfilled and the level of information search applied before the purchase. These will therefore be defined in part.

### 2.2.1 Purchase visibility

Products that have a high visibility are used as a way of signalling identity for consumers (Berger, Heath 2007). Products that are visible and signal luxury are used to convey a luxurious lifestyle and wealth, whereas products that are visible but not prominent can signal an alternative lifestyle or simply be a result of a low economic state (Drèze, Han \& Nunes 2010). Consumers that purchase products with a high level of visibility are therefore seen to base their brand choice on how they will be perceived by their surroundings (Ajzen, Fishbein 1975).

Purchase visibility applies mostly to expensive products with a low re-purchase frequency. Eyecatching purchases are influenced by subjective norms and have an extended problem-solving process (Bray 2008). The purchase visibility for FMCGs is therefore defined as low, which implies that other factors influences the brand choice more. These factors are discussed below.

### 2.2.2 Need fulfilment

Experiential aspects of consumption affects the purchasing behaviour for consumers in the relevant product categories (Hirschman, Holbrook 1982). Purchases with the aim to fulfil a fundamental need are seen as utilitarian, whereas purchases with the aim to create enjoyment, indulgence or joy are seen as hedonistic. Focusing on tangible benefits of conventionally purchased goods defines the utilitarian product categories. By looking at categories that carry a symbolic, individual meaning to the consumer, hedonistic product categories are investigated.

### 2.2.3 Level of information search

Consumers can either plan their purchase before entering the store, or experience the need recognition in-store. This results in planned purchases and impulse purchases. The planned purchases are defined by the fact that the consumer make the purchasing decision prior to entering the store (Cobb, Hoyer 1986). The consumer's aim is to purchase the product, but can be influenced in their brand choice by factors in-store.

The behaviour of purchasing on impulse is created by factors in-store. The most prominent factors are: ease of purchase, a wide range of goods, in-store promotions and discounts (Childers,

Peck 2006). The unplanned impulse purchases can be defined into four types: oversight, deferred decision, quick purchase and unplanned demand (Virvilaite, Saladiene \& Bagdonaite 2009). Based on the short period from need recognition to purchase, all four types are denoted as 'impulse', irrespectively of the influencing factors in-store.

The impulse purchases occur as a response to in-store stimulus, leading to an immediate reaction and purchase. The behaviour is, hence, reactive and based on emotional triggers, decreasing the perceived control for the consumer in the purchasing decision (Virvilaite, Saladiene \& Bagdonaite 2009). As such, the impulse purchases do not follow a cognitive/rational consumer decision model.

To understand consumer behaviour from an attitudinal approach, companies use consumer surveys to define attitudes and perceptions of the brand. This approach involves many different types of metrics to estimate market position and profitability. These will therefore be discussed further to provide a full understanding of consumer research and estimation models.

### 2.3 Customer Metrics

Tracking data is widely applied to understand consumers and to assess market positions. Ittner and Larcker (2003) mentions that most companies measure the wrong thing or have failed to connect the measured variables to sales and profit areas. When assessing customers' actions through the previously mentioned models, and through the use of conventional tracking data, five main metrics are commonly applied: Customer Perception, Customer Attitude, Customer Intention, Customer Satisfaction and Customer Loyalty. These will each be further developed to obtain a full understanding of tracking technique as it is currently applied on the market.

### 2.3.1 Customer Perception

A customer views a brand in a certain way, a view that is influences by exogenous variable (Howard, Sheth 1969). These variables are most often, but not exclusively, advertising, subjective norms and recommendations. The perception is not directly connected to the information search but is connected to the individual stimulus and does not necessarily lead to a purchase (ibid.).

Customer perception is something that all customers have, irrespectively if they purchase the specific brand or the competing brands. As long as a brand is within the customer's evoked set, a perception of the brand exists. This perception does not necessarily mean that the customer prefers the brand, it is simply that the customer is aware that the brand exists and provides a solution to a problem. Perception is therefore held separate from Preference which is normally measured through ranking of alternatives and based on customer attitude rather than perception.

### 2.3.2 Customer Attitude

Customer's attitude towards brand can be measured to gain knowledge about how the consumer transforms external information in the form of perception, to actual attitudes towards a brand.

Attitudinal equity is usually measured through establishing which brands in the given product category that are relevant to the respondent. This can be achieved through questions about used, preferred and considered brands. These answers are put in relation to brand performance metrics for the relevant brands. Through calculating attitudinal equity, companies can estimate how their brand is interpreted and their customer's attitude towards their brand in relation to their competitors'. Although it is common practice to validate towards tracking data, attitudinal metrics cannot fully explain real world actions in the form of purchases. (Bongers et al. 2007)

A positive attitude towards a brand does not always result in purchase due to exogenous influencers, purchase barriers and low intention to actually purchase the brand. Bongers et al (2007) describes this as 'Market Circumstances' and stress the importance of understanding actual market behaviour to underpin visible sales.

### 2.3.3 Customer Intention

Where there is no behavioural constraint, intentions can accurately predict behaviour (Ajzen 1991). When there is a choice between many available alternatives, such as FMCGs, fewer behavioural constraints exist and intentions can more often be met. Based on this, intentions have a higher predictability than attitudes (Ajzen, Fishbein 1975). Unfortunately, not all behaviours can be assessed through intentions and factors that are controlled by the customer. Therefore, it is of importance to consider the external factors that can influence the behavioural control within situations. For everyday commodities, the most common factors influencing consumer behaviour are switching barriers, availability in store and promotional offers (Gupta, Lehmann \& Mela
1997). The perceived ease or difficulty of performing the intended behaviour is therefore a reflection of past behaviour and anticipated obstacles.

### 2.3.4 Customer Satisfaction

Customer satisfaction is thought to increase share of spending and lead to higher revenue and life-time value (Aksoy et al. 2005). Measurement of satisfaction is one of the most common proxys for loyalty and estimates for future sales. Research has shown how satisfaction has an impact on measures for purchase intention and, through that, influences purchase behaviour and profit (Ittner, Larcker 2003, Anderson, Mittal 2000).

Söderlund (2010) defines satisfaction as a 'state of mind' for the consumer. Three dimensions for tracking this metric should therefore be mentioned:

1) Satisfaction measures are usually conducted on a negative/positive scale and marketers need to take into account that the single score carries a lot of information.
2) Satisfaction is a post-consumption variable and only respondents that have purchased and experienced the product can respond to questions related to the metric.
3) Satisfaction is rated differently between different individuals, depending on what their evaluation criteria looks like. It is, hence, a highly subjective score.

Given these circumstances, the measurement of satisfaction is far from generalizable. The loyalty is considered as a result from satisfaction and will therefore be further discussed.

### 2.3.5 Customer Loyalty

Loyalty is stated to determine which competitor in an industry is most profitable as market share and revenues increase while cost of acquiring and serving customers decreases, leading to an increase in profit (Reichheld 1993). Companies need to target the right customers in order to achieve this. While this is great news for the potential sales and profit figures, not all customers are loyal (Gupta, Lehmann \& Mela 1997).

Recent publications have stressed the ambiguity of non-loyal customers and that these customers tend to switch within the product category, hence, being non-loyal to multiple brands (Sharp 2010). Practitioners tend to focus on increasing sales within the loyal customer segment as it is considered to be more time efficient since loyal customers are less price sensitive and tend to
purchase their favourite brand as a habit (Gupta, Lehmann \& Mela 1997). Recent research has shown how the average purchase rate does not vary much, but penetration rate does (Sharp 2010). While an increase in loyalty level leads to higher penetration rates, increasing penetration does not increase loyalty and, hence, does not have the same double effect.

Loyalty can be defined and measured in many different ways. A loyal customer is one that prefers to purchase a brand, does so repeatedly and has a strong connection to it (Bongers et al. 2007). This definition connects positive attitude and satisfaction towards a brand to the purchase of it, resulting in a big share of the customer's wallet. Loyalty can, hence, determine which competitor in an industry that is the most profitable. Market share and revenue increases, while cost of acquiring and serving customers decreases, leading to a higher profit (Reichheld 1993). To achieve this, it is important to target the right customers, with a high possible profitability.

Customer loyalty is dependent upon the preference and attitude that drives it and the circumstances that permits it (Bongers et al. 2007). Loyal behaviour can, hence, be intended but not acted out due to external factors. Based on this, there are two types of observed loyalty: true long-term loyalty and false loyalty (Jones, Sasser 1995). A variety of factors can generate false loyalty and make customers seem loyal when they are in fact not. These factors include: government regulations, high switching costs, trademarked technology and strong loyaltyprograms (ibid.). With the presence of such factors, loyal intentions does not equal loyal behaviour.

In order to properly measure loyalty, both attitudinal loyalty and behavioural loyalty should be assessed. Attitudinal loyalty is created through emotions towards a brand and is conceptualised as satisfaction experienced in the post-consumption phase (Kim, Lee 2010). The two most tracked measures for attitudinal loyalty are, therefore, satisfaction and propensity to recommend (Aksoy 2013). Measuring satisfaction can bring some clarity to the mental loyalty picture, but lacks when it comes to actual behavioural loyalty. Likelihood to recommend is achieved mainly though the Net Promoter Score (NPS), where respondents rank their probability to suggest the brand to friends or family (Reichheld 2003). This measure can connect attitudinal loyalty to behavioural loyalty when the assessing question is asked in close proximity to purchase action for the given brand. Measures such as retention, frequency of purchase and share of category
spending are further applied to determine behavioural loyalty (Aksoy 2013). In order to define this type of measures, share of wallet will hereafter be discussed.

### 2.4 Share of Wallet

The previously introduced measurements allow for insights to consumer attitudes and cognitive processes. Unfortunately, they lack when it comes to descriptive power over actual actions instore and real sales figures. By measuring the share of the customer's wallet that the brand possesses, insights to customer specific profitability and opportunities can be obtained. This allows for understanding of wallet share on an individual level and market share on an aggregate level.

A big part of the research on Share of Wallet focuses on the loyalty-profitability chain. As it is assumed that customer loyalty has a direct impact on the number of purchases from that brand, Share of Wallet is seen as an outcome of loyalty levels (Garland 2004). For products and services with high exit barriers, customers can easily become entangled with one provider irrespective of loyalty level, leading to inertia. In cases like this, Share of Wallet is seen as a bad estimate to loyalty as the customers themselves do not have to opportunity to choose their favourite brand for every purchase occasion (ibid.).

### 2.4.1 Defining Share of Wallet

Share of Wallet can generally be defined as the share one brand has of the total spend within the specific product category (Aksoy et al. 2007). The size of the wallet is therefore dependent on the size of the total product category and customer specific spend within this.

There are two main routes in order to grow future revenue: 1) lifetime value modelling: targeting customers that have historically generated large amounts of revenue for the brand, and 2) targeting new customers to grow market share (Aksoy et al. 2007). Which of the two approaches to increase sales is most suitable is dependent on how saturated the market is, but also how large share of the customer's wallet one brand has. Customers with a high Share of Wallet can increase revenue for a brand if they increase their spending within the given product category, whilst customers with a small Share of Wallet have a higher potential for revenue growth by redistributing their spend within the product category (Rosset et al. 2005).

Increased revenue can, hence, be obtained through increasing the total size of the wallet or increasing the share within the wallet. It has been proven more financial profitable to focus on improving customers' Share of Wallet than merely focusing on customer retention (Aksoy et al. 2007).

Customers with a high percentage Share of Wallet are harder to influence in such a way that increases the revenue without increasing the spending within the entire product category, while low share of wallet customers can increase the market share rapidly but, as the cost for obtaining new customers is high, the profitability generated from these customers is lower. The large customers can, therefore, be either the most profitable or the least (Kaplan, Narayanan 2001). In short, customers with a high Potential-of-Wallet (PoW) should be targeted in order to increase profitability (Brich, Trojan \& Palaci 2013).

Rosset et al introduces three theoretical definitions to Share of Wallet (Rosset et al. 2005):
Total: is the total spending by a customer in the relevant area, the relevant product categories that can be seen as substitutes to each other.

Served: is the total opportunity that is attainable for the specific customer by the brand. How large share of the customer wallet that is spent within the product category within which the specific brand is active. What can feasibly be obtained by the brand.

Realistic: is the share of the customer's wallet that the brand can expect to obtain. The authors state that it is not likely to obtain the entire Served share of wallet given that competitors exist on the market.

In order to test on a brand specific level, the Served definition is best applied as it focuses on specific product categories. The value of the wallet is dependent on the size of the wallet and the profile of the customer, hence, customer insights and tracking data are relevant in order to fully understand the relationship between wallet size and Share of Wallet.

### 2.4.2 Measuring Share of Wallet

Measuring Share of Wallet is rare, though a few models for estimating the metric have been developed. Research within the area has focused mainly on the retail banking business, where data is more easily accessible and models have been developed to estimate Share of Wallet
without tracking data (Du, Kamakura \& Mela 2007, Baumann, Burton \& Elliott 2005). In addition, a few models have been developed to estimate Share of Wallet from respondent's stated purchase intention and stated purchase probability. Three models will hereafter be further explained:

1) the Generalized Binomal Model which estimates Share of Wallet without survey data but based on in-depth knowledge about the customer,
2) the Juster Scale which estimates Share of Wallet through stated purchase probability, and
3) the Wallet Allocation Rule which estimates Share of Wallet through the consumer's stated consideration set.

### 2.4.2.1 The Generalized Binomal Model

The preeminent model within the area is an application of the Generalized Binomal Model (GBM), focusing on the number of transactions a given customer makes (Brich, Trojan \& Palaci 2013). This model looks at the served Share of Wallet in relation to the brand's currently possessed size of the customer's wallet.

Using the GBM as an estimation of Share of Wallet requires information about a customer's recency of purchase, frequency of purchase, average money spent in the category and socioeconomic variables. This information is easily obtainable in subscription-based industries and other high-involvement purchases that require a relationship between customer and company, which is why this approach is popular in the retail banking industry. This type of data is harder to come by in less relationship-intense industries such as the FMCGs industries, where estimation models based on survey data can be more easily applied.

### 2.4.2.2 The Juster Scale

The Juster Scale determines purchase probability through one question that assesses stated purchase probability (See Table 1). The model was originally developed to capture the probabilities of future purchases as expressed by the respondents themselves (Juster 1966). The initial focus of the model was to capture purchasing probability of a specific product category, not focusing on predictability for specific brands within this category (Brennan, Esslemont 1994).

Table 1: The Juster Purchase Probability Scale

| Scale | What are the prospects that you will personally purchase the <br> following brand in the next four weeks? | Outcome |
| :---: | :--- | :---: |
| $\mathbf{1 0}$ | Certain, practically certain | 99 in 100 |
| $\mathbf{9}$ | Almost sure | 9 in 10 |
| $\mathbf{8}$ | Very probable | 8 in 10 |
| $\mathbf{7}$ | Probable | 7 in 10 |
| $\mathbf{6}$ | Good possibility | 6 in 10 |
| $\mathbf{5}$ | Fairly good possibility | 5 in 10 |
| $\boldsymbol{4}$ | Fair possibility | 4 in 10 |
| $\mathbf{3}$ | Some possibility | 3 in 10 |
| $\mathbf{2}$ | Slight possibility | 2 in 10 |
| $\mathbf{1}$ | Very slight possibility | 1 in 10 |
| $\mathbf{0}$ | No chance, almost no chance | 1 in 100 |
|  |  |  |

The predictability for Share of Wallet on a brand level requires the Juster Scale assessment for each individual brand separately, but can be successfully adapted by companies that wish to predict Share of Wallet for their specific brand and not the entire industry. Probable purchases have been proven to more accurately predict purchasing behaviour than pure purchase intention, strengthening the models accuracy (Wright, MacRae 2007). In FMCG industries, the intention and probability of purchase are similar, as the re-purchase rate tend to be high, leading to the Juster scale being used to estimate behaviour through intention.

### 2.4.2.3 The Wallet Allocation Rule

The Wallet Allocation rule is based on intentional data, taking into account both the rank and the number of competitors in the customer's consideration set (Keiningham et al. 2011). The model is, hence, based on two questions: preferred brand and other used brands.

$$
\text { Share of Wallet }=\left(1-\frac{\text { Rank }}{\text { Number of brands }+1}\right) *\left(\frac{2}{\text { Number of brands }}\right)
$$

The rank a customer assigns a brand relative to the other considered brands in the evoked set predicts Share of Wallet through survey data. This model can be derived through questions that are normally asked in brand tracking surveys, making the model easy to apply for many companies. That is why this model have become so popular and is more or less the standard model for many tracking companies.

### 2.5 Hypotheses

Based on the presented models, metrics and methods to estimate Share of Wallet, it is suggested that a discrepancy between attitudes and behaviour exists. The Wallet Allocation Rule estimation model is therefore considered to be different from actions since it is based on attitudes in the form of top-of-mind and consideration set. Attitudes towards brands are not always the same as attitudes towards actually performing the action. Therefore, the following hypothesis is constructed:

H1: Consumers' attitudes and actions are not aligned on an aggregate level

The difference between purchasing behaviour based on the characteristics of the product categories are suggested to have a different impact on the relationship between attitude and behaviour. For hedonistic purchases, the consumer aims to fulfil an indulging need connected to brand specific attributes. For these product categories, it is suggested that the top-of-mind brand is also the purchased brand. Therefore, the following hypothesis is constructed:

## H2a: Consumers' attitudes and actions are aligned in hedonistic purchases

Utilitarian products are purchased to fulfil a need. In these purchases, it is suggested that there are more important influencing factors than liking a brand and that the attitude towards a brand does not always result in a positive attitude towards purchasing that brand. This discrepancy results in the following hypothesis:

## H2b: Consumers' attitudes and actions are not aligned in utilitarian purchases

In purchases that are impulsive, where the purchase decision and brand choice are made close to simultaneously, many in-store factors influence the brand choice. The presented purchasing activators show how the impulse purchases does not follow a cognitive/rational path to the purchase decision. The impulsive purchases are therefore investigated in the following hypothesis:

H2c: Consumers' attitudes and actions are not aligned in impulse purchases

Since the planned purchases are decided prior to entering the store, the behaviour is proposed to follow the intended behaviour. As the introduced models suggest, attitude and intentions are closely related. The following hypothesis is therefore constructed:

## H2d: Consumers' attitudes and actions are aligned in planned purchases

The presented consumer decision making models collectively show how external factors influence the purchasing decision. The connection between intention and actual behaviour is suggested to be influenced by purchasing barriers and in-store attributes. The following hypothesis is therefore constructed:

H3: Pre-purchase intentions that lead to purchases are primarily influenced by economic and instore factors

The behavioural loyalty is determined through reported loyalty that lead to behaviour. Since loyalty is closely connected to satisfaction, cognitive/rational routes to behaviour are suggested
to be applicable. The behavioural loyalty is, hence, affected by the cognitive ideas and identity. The following hypothesis is therefore developed:

H4: Post-purchase behavioural loyalty is primarily influenced by cognitive factors

### 2.6 Concluding theoretical remarks

Consumer behaviour can be described from both a cognitive/rational and humanistic approach. The cognitive/rational approach describes how consumers are rational decision makers while the humanistic approach looks at the same processes but from an emotional viewpoint. The models, collectively, show how exogenous factors influence behaviour and how attitudes towards a brand are not always the same as the attitude towards purchasing the same brand. These insights are complemented by product category characteristics, which emphasises the importance of understanding what type of product is sold in order to properly understand theoretical behaviour. Common measures to understand consumers are both based on pre-consumption metrics and post-consumption metrics. The pre-consumption metrics include perception, attitude and intention, while the post-consumption metrics are satisfaction and loyalty. In order to measure actual behaviour, the sales figures have to be obtained. This can be achieved thorough defining the share one brand has of the total spend within the total product category, the customer's Share of Wallet.

Based on the discussed theory, the hypotheses are defined:
H1: Consumers' attitudes and actions are not aligned on an aggregate level
H2a: Consumers' attitudes and actions are aligned in hedonistic purchases
H2b: Consumers' attitudes and actions are not aligned in utilitarian purchases
H2c: Consumers' attitudes and actions are not aligned in impulse purchases
H2d: Consumers' attitudes and actions are aligned in planned purchases
H3: Pre-purchase intentions that lead to purchases are primarily influenced by economic and in-store factors

H4: Post-purchase behavioural loyalty is primarily influenced by cognitive factors

The following section will describe the methods applied to investigate these hypotheses.

## 3. Methodology

The following section will focus on the choice of subject, approach and design of the study. The pre-test will be described, followed by the results of this and the implications that this have on the research design for the main study. Lastly, the research reliability and validity will be emphasised.

### 3.1 Choice of subject

As previously mentioned, it has become increasingly important to understand consumers. In order to achieve this, it is common practice to use tracking data where consumers' perception, attitude and intention are measured. Even though this type of data can provide companies with insights to satisfaction and attitudinal loyalty, actual purchasing behaviour is rarely measured. Companies, hence, tend to forget to measure what matters the most: sales and profit areas.

What consumers say they do and what they actually do tend to differ. There is a discrepancy between the customer's heart and the customer's hand. Tracking data generally draws conclusions from measures of attitude and loyalty about how the consumer will act in-store and disregards this discrepancy. According to Nordfält (2007), 80 percent of the purchase decisions are made in-store, leading to the conclusion that external variables can influence a decision until the purchase is completed.

It is desirable to obtain as much as possible of the customer's share of wallet, at an individual level, and market share, at an aggregate level, to increase profitability and loyalty among consumers (Anderson, Mittal 2000). To keep track of this, and how influential media investments are, companies use attitudinal tracking data where consumers state their top-of-mind and consideration set. By asking these questions, companies can see their customer's current perception, something that can easily change from external influencers such as recommendations from others, advertising and media investment in general.

It is a common belief that brands that are top-of-mind among consumers will win the battle of the consumers' share of wallet. While this belief is accurate as long as proxy variables for Share of Wallet that are based on attitudes and intentions are applied, such as the Wallet Allocation Rule (Keiningham et al. 2011) and the Juster Scale (Brennan, Esslemont 1994), actual behaviour
is not only influenced by attitudes. This paper will therefore explain the connection between the top-of-mind and consideration set, together with external variables that affect the discrepancy between purchase intention and purchase behaviour. This is done in order to present what has an effect on the difference between attitude, intention and loyalty (the commonly measured tracking data) and action (actual purchases conducted). The study will test already acknowledge theories, the Wallet Allocation Rule, Juster Scales and Net Promoter Score. This will allow for managers to understand how tracking data should and should not be used to understand their consumers' actual behaviour.

### 3.2 Choice of approach

This section will introduce the approach for the paper, in other words, what kind of approach that is chosen to tackle this phenomena. According to Jacobsen (2002) there are four problems within methodology:

- Inductive vs Deductive
- Quantitative or Qualitative
- Holistic or Individualistic
- Close or Distance

The first problem is if the methodology is inductive or deductive. A deductive methodology is when the study goes from theory to empirical evidence, where one create expectations based on previous knowledge and test these towards a hypothesis. The opposite of deductive is inductive, which goes from empirical evidence to theory. That is, to conduct a test without any hypotheses and the data is initially collected and processed, leading to theoretical connections. This paper will take a deductive approach in order to test different hypotheses that are based on previous theory and will, in addition, extend previous research.

The second problem is quantitative versus a qualitative method. A qualitative method is a more flexible approach to the subject where the approach can more easily be changed and the study is more open to new information. The opposite of this is the quantitative method, where the approach is that the social reality can be measured in terms of numbers and can be handled with statistical methods. This thesis has a quantitative method since the study tracks a large amount of respondents in order to find connections between them, which would have been too hard in a
qualitative method. Since the purpose of the thesis is connected to assessing the difference between attitudes and action, the approach is dependent on the assessment of tracking data. Since consumer tracking is based on quantitative methods, the study extends this existing quantitative approach with reported behaviour.

The next problem is if the study is holistic or individualistic. An individualistic approach is when the individual person is the most important data source by either what they do or say. The methodology for an individualistic approach is where one aggregate the respondents' answers in order to see trends. A holistic method is when the study aims to understand a phenomenon that is complex between the single individual and the special bond the individual has with the phenomenon. This basically means that the researcher is trying to understand social collaboration and how individuals can act in different ways depending on the circumstances. This paper applies an approach that is individualistic, since the respondents' answers in the study are aggregated. As previously mentioned, the study is based on a quantitative method and therefore an individualistic approach will provide better and more relevant results.

The last problem is how close or distance the study is to the examination object. In similar studies, this applies to the people who take part in the study. To have a big distance between the researcher and the study object have for long been considered as the best method, as the researcher cannot influence the examination object in the same way (Jacobsen 2002). In such a case, the only contact between researcher and respondent is when the survey responses are collected. In order to achieve this, the study is designed to collect responses from a distance.

### 3.3 Partner company

To collect results with high quality, the study is conducted in collaboration with a partner company, Nepa AB. Nepa provided the financial resources required to make this study possible, as well as their expertise within tracking brands and companies. This allowed for the design of a special respondent group with a high proven response rate, quality of answers and generalizability as it represents the entire population. Besides these inputs, the study is designed, maintained and analysed by the authors.

### 3.4 Preparations

Before the main test was launched, a pre-test was conducted in order to make the design of the survey understandable and not too long, while still delivering relevant data. Based on these results, the survey was designed and pre-launched to a small group of respondents to optimise the full-scale test. These preparatory actions will be further discussed.

### 3.4.1 Pre-test

The main purpose of the pre-test was to determine what variables are the most relevant and influential over the consumer's decision in-store but also which category to use.

The purpose of having different categories was to see if there are any difference between 'Utilitarian' vs 'Hedonistic purchases' and 'Planned' vs 'Impulse purchases'. Since it is considered that the visibility of FMCGs is, on a general level low, this dimension of purchase characteristics is excluded from the study. To test the remaining four characteristics, the respondents got to see the 6 different categories with a high re-purchase rate and rank these from the four characteristics. These categories were chosen as they are currently tracked in Nepas panels and have a high re-purchase frequency which will provide better answers when tracking purchasing behaviour over a set time period. The results from this test are displayed in Table 2.

Table 2: Pre-test categories

| ( $n=34)$ | Utilitarian | Hedonistic | Planned | Impulse |
| :--- | :---: | :---: | :---: | :---: |
| 1. Chocolate | 0 | $\mathbf{2 0}$ | 4 | 10 |
| 2. Toilet Paper | 12 | 1 | $\mathbf{1 5}$ | 6 |
| 3. Diapers | 10 | 5 | 10 | 9 |
| 4. Mineral Water | $\mathbf{1 5}$ | 5 | 9 | 5 |
| 5. Chewing Gum | 6 | 8 | 5 | $\mathbf{1 5}$ |
| 6. Cream Cheese | 7 | 9 | 8 | 10 |

The pre-test is designed to capture absolute numbers for what type of purchase consumers consider the category to be. This approach is chosen to put the categories against each other with absolute numbers to achieve clear category specific characteristics. Another approach would be
to rank the categories from "hedonistic to utilitarian" and "impulse to planned", which would give a less specific ranking as the categories then are not put against one another.

The results from the pre-test led to four categories being chosen to represent the different characteristics of product categories. Within the chocolate category, 20 out of 34 respondents stated that they purchase chocolate to indulge themselves, hence, as a hedonistic purchase. As this was clearly higher than any other investigated category, chocolate represents hedonistic purchases in the main test.

While in toilet paper, 12 respondents ranked it as utilitarian and 15 respondents as planned purchases. As 15 was the highest in the planned table, toilet paper was chosen as the planned category for the main test. People might see this category as somewhat utilitarian as well but, as the pre-test indicates, it is mainly a planned purchase. The third category was diapers which did not stand out in the result table, where utilitarian, planned and impulse purchases almost had the same rank. Therefore, this category is excluded in the main test.

The fourth category was mineral water, where 15 respondents ranked it as utilitarian, which was the highest rank for utilitarian purchases. This category is therefore applied, in the main test, as the utilitarian variable. The fifth category was chewing gum, where 15 respondents stated that they purchase it on impulse. Since this was the highest rank in the impulse table, it is chosen to represent impulse purchases in the main test. The last category, cream cheese, was like diapers with no results that stood out, either in the category itself or within the different purchase behaviour tables. This category is also excluded from the main test.

Based on the results from the pre-test, the following variables are applied:

- Chocolate as hedonistic purchases
- Toilet paper as planned purchases
- Mineral water as utilitarian purchases
- Chewing gum as impulse purchases

Twelve factors that have been proven to have an effect on purchase decisions were tested. 34 respondents answered the survey regarding what they consider as important when they purchase a product. The responses were reported on a 7 -point scale (where $1=$ not important at all, and

7=highly important). The variables tested and the mean values for each variable are presented below (See Table 3).

As shown in Table 3, variables such "Price", "Availability" and "I recognize the brand from previous purchases" are proven to be the most important factors when choosing what brand to purchase. The factors with the least influence over purchase decision and, hence, deemed irrelevant for the full scale test are: "It fits my personality" and "My friends and family buy that brand". These results show a tendency towards what to expect from the main test, with a larger respondent group and is therefore seen as representative when it comes to these specific factors.

Table 3: Pre-test variables

| When you purchase everyday commodities, what <br> is important for your choice of brand? | Mean <br> $(n=34)$ |
| :--- | :---: |
| 1. Price | 5.62 |
| 2. Availability | 5.35 |
| 3. I recognise the brand | 5.27 |
| 4. I know what I get | 5.03 |
| 5. Quality | 5.00 |
| 6. That there is a special offer for the brand | 4.68 |
| 7. That I trust the brand | 4.59 |
| 8. I usually purchase the brand (habitual <br> purchasing) | 4.50 |
| 9. I've recently seen a commercial for the brand | 4.09 |
| 10. I'm loyal to the brand | 3.68 |
| 11. It fits my personality | 2.91 |
| 12. My friends and family buy that brand | 2.59 |

Variables that scored a higher mean value than 4.5 are included in the main test, since the variables with a lower mean value are scored further apart, with a higher deviation amongst answers. This distinction is represented by the top eight variables in Table 3.

The pre-test also indicated that the definitions for "Price" and "Quality" were not clear. Therefore, these variables were developed for the main test to capture the intended factors better.

The new variables capture the price in relation to the quality, as well as both price and quality in part.

The variables that are to be tested in the main-test are both in-store influencers, as well as economic and cognitive in nature. The in-store influencers are promotional offers and availability, the economic variables are connected to the price and quality, while the cognitive variables are connected to knowing, perceiving and remembering (See Table 4).

Table 4: Economic and Cognitive influencing variables

|  | Factor | Variable name |
| :--- | :--- | :---: |
| Cognitive | I recognise the brand | Recognition |
|  | I prefer to purchase the brand | Preference |
|  | I usually purchase the brand (habitual purchasing) | Habit |
|  | I trust the brand | Trust |
| Economic | High quality | Low price |
|  | In-store | Good price in relation to the quality |
|  | The brand is on special offer/price | Quality |
|  | The brand has a promotional offer | Price |
|  | The brand is available in-store | PrfeQuality |

### 3.4.2 Pre-Launch

In order to minimise the flaws in the survey, a soft launch was conducted. The survey was launched to a small respondent group 24 hours before the actual launch. The main purposes of soft launching the survey was to estimate an approximate response rate, estimating time of completion, identifying points of drop-outs and to make sure that the wording was understandable. The result from the soft launch proved no flaws and a low drop-out rate, leading to the launch of the actual survey without changes to the design or wording but gave insight to the approximate time spend filling out the survey.

### 3.5 Survey design

The survey was conducted together with the tracking company Nepa $A B$, in order to reach a larger mass of respondents. The respondents are used to answer surveys on a weekly basis. Initially, the respondents were asked through mail however they were willing to answer a survey for a longer period of time, once every week for a five week period. The respondents were also given incentives to answer the survey in order to increase the quality of the answers. The incentive consisted of lottery tickets, which the respondents received after three weeks and five weeks respectively. Respondents that missed one survey during the period were removed from answering the following week. All responses are thereby kept relevant throughout the research period.

The survey consists of three parts (See Appendix 5). Each part is different when it comes to expected contribution and question design. The first part assesses the estimation models, focusing on questions that are normally asked in brand tracking surveys. These questions are intended to estimate brand preference, loyalty metrics and purchase intention.

The second part of the research defines the actual purchase behaviour, where each respondent is encouraged to save receipts from the past week to properly report purchase behaviour. This part of the survey is kept identical throughout the five week period. The respondents reported the amount of units purchased and not the price paid. This approach allows for purchases in different types of stores, from big box formats to convenience stores, where the price for a homogenous product can differ. The chosen approach disregards the price setting within different store formats and concentrates on brand choice in relation to other available brands.

The third part concerns influencing variables in the purchased categories and specifically the purchased brands. It aims to assess the influence from brand attributes and exogenous variables upon realised purchases. These variables were defined in the pre-test and answered on a 1-7 point scale (where $1=$ not important at all, and $7=$ highly important). The respondents answered what factors influence their purchase decision for the brands purchased, within one category per week. If the specific respondent did not purchase within that category during the past week, the ranking variables were displayed for another category. This results in a different number of respondents within each category when it comes to the influencing variables.

The focus on units and not price in the purchase reporting is complemented with the investigation of 'low price' and 'price/quality ration' in the variable section. By this, the influence from relative brand price is captured. This approach is chosen since the price for the same brand can differ depending on the store, while units are constant.

Every Monday at noon the respondents got an email with a link to the survey. To increase the response rate, a reminder email was sent out on Wednesday to respondents that still had not answered the survey for the specific week. This resulted in an average response rate of approximately $90 \%$.

### 3.6 Method of analysis

In order to conduct the analysis for this paper, the statistical program SPSS is used. The tests applied are mean tests, independent T-tests, cross tables and regression models. The significance levels in the paper are labelled as follows: $*=>90, * *=>95 \%$ and $* * *=>99 \%$.

The regression models look at the influence of economic, in-store and cognitive factors on two dependent variables: pre-purchase intentions and behavioural loyalty. This approach is relevant for investigating the hypotheses of the thesis. In addition to this, the same dependent and independent variables are applied in regressions within each product category. This will provide further managerial insights and connect to the purpose of the thesis: to deliver product category specific insights and advice.

### 3.7 Study reliability

### 3.7.1 Reliability

The reliability of the study concerns the extent to which the surveys yield the same results on repeated trials or to multiple respondents. To ensure reliability, it is important to be aware of potential factors that have an effect on the results. The effects that are defined can be divided into two effects: examine effects and context effects (Jacobsen 2002).

Examine effects are about observations that can have an impact on the results. 238 people answered the surveys in the study during a time period of five weeks. One risk with long-term studies is that respondents are stressed, unwilling to answer or reporting the wrong answer in order to finish faster. To overcome this risk, the study is conducted in collaboration with the
tracking company Nepa, where the respondent groups are used to responding to surveys and are known for providing high quality answers. To further increase response rate and the quality of answers, each respondent receives incentive in the form of two lottery tickets, one after three completed surveys and one after five completed surveys. The focus is on the same respondents for the entire study in order to properly see behavioural patterns and further remove the risk of low quality answers.

Concerning the context effects, the study is conducted in an uncontrolled environment since the surveys have been answered in the respondent's own environment. This type of environment is impossible to control and therefore the results may have been affected because of it. In order to remove this uncertainty, all responses were collected I the same way, resulting in similar circumstances for each respondent.

In order to test the consistency of the applied measures, the internal reliability can be evaluated through Cronbach's alpha (Malhotra 2010). The internal reliability refers to the consistency of the different measures that make up a scale. The theoretical value of Cronbach's alpha varies between zero and one, where a higher value is desirable but values above 0.6 are acceptable and values above 0.7 are considered to have good internal reliability. The alpha obtained in this study is 0.73 , which emphasises that internal reliability exists.

### 3.7.2 Internal validity

Internal validity is about how the validity of the results and how the phenomena is described in a correct way (Jacobsen 2002), this is to avoid both randomised and systematic measurement errors (Söderlund 2005). The measurement validity concerns, in more direct terms, if the measurement actually measure the concept it is intended to measure.

This paper has a high internal validity since it follows Jacobsen's (2002) methods. That is to control the survey and conclusion with previous research and to critical review the results. It is further based on theory and methods from previous research, which increases the internal validity (Söderlund 2005). To increase the difference between answers and, hence validity, the surveys are designed to use a seven-point scale.

### 3.7.3 External validity

External validity defines how representative the results are for the entire population. One popular way of doing this is to have a high significance level on the presented results, usually one to five percent (Jacobsen 2002). In this thesis results will be accepted on a ten percent level in order to avoid type 2 errors. In other words, the study is trying to eliminate the possibility of accepting a false hypothesis. As previously mentioned, the study is conducted in an uncontrolled environment. This further strengthens the external validity (Malhotra 2010).

The generalizability from the sample population on the entire population is strengthened by the significance levels. Further, the panels designed in collaboration with Nepa, were chosen in order to represent the entire population from demographic factors, leading to a generalizability of the study. Even though the study is focused on the Swedish market, purchasing patterns are proven to be the same across country borders and tracking data is collected in similar ways (Durvasula, Lyonski \& Andrews 1993). The study is therefore seen as generalizable across country borders as well.

## 4. Results

The results will be presented in the following section. Each hypothesis will be addressed and either supported or not supported based on the presented results.

### 4.1 H1: Consumers' attitudes and actions are not aligned on an aggregate level

The survey focused on purchase behaviour in four different categories that are usually available in grocery stores: Chocolate, Mineral Water, Chewing Gum and Toilet Paper. The initial focus for the analysis is to determine differences between consumers' intended behaviour and actual behaviour in these four categories. The estimate for intended behaviour is calculated by using the wallet allocation rule, which is dependent on consumers' top-of-mind and consideration set in each category. The actual behaviour is calculated through adding all purchases in the observed period and assigning the percentage purchased to each brand in all four product categories.

The initial analysis is conducted on an aggregate level, looking at all four product groups at once instead of individually. The analysis is, in addition, aggregated over each individual. This approach will provide an overall view of the discrepancy between attitude and action.

As shown in Table 5, consumers' behaviour and their actual share of wallet has a mean value of 0.8326 , which means that $83.26 \%$ of customer's wallet, on an aggregate level, is dedicated to one brand. This can be compared to the estimated share of wallet through the W.A.R, which has a mean value of 0.7216 , indicating that customers are predicted to spend $72.16 \%$ of their wallet on the top-of-mind brand on average. The significant difference between compared means is therefore 0.1110 . The paired samples $t$-test proves that the difference is significant on a $1 \%$ level (See Table 5). These results show that there is a difference between the estimation model and observed actual behaviour. The observed difference in means show how the W.A.R model underestimates the actual share of wallet that customers spend on their highest ranked brand.

Table 5: Paired Samples T-test, Behaviour and W.A.R

|  | Mean | Mean <br> Difference | $\boldsymbol{N}$ | Significance <br> Level |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Behaviour | 0.8326 |  |  |  |
| W.A.R | 0.7216 | $\mathbf{0 . 1 1 1}$ | 238 | $0.000^{* * *}$ |

These results support H1.

### 4.2 Difference between Product Categories

The difference between the estimation model, W.A.R, and actual behaviour will hereafter be presented depending on the characteristics of the product categories as they are significantly different within all investigated categories (See Appendix 6).

### 4.2.1 H2a: Consumers' attitudes and actions are aligned in hedonistic purchases

For the hedonistic product group, chocolate, there is a difference in compared means of 0.2824 , on a $1 \%$ significance level (See Table 6). This implies that the intended behaviour and observed behaviour for hedonistic products differs. The W.A.R is here proven to underestimate the behaviour within this product category and shows a tendency to underestimate the purchase behaviour of hedonistic products.

Table 6: Paired Samples Statistics: Chocolate

|  | Mean | Mean <br> Difference | $\boldsymbol{N}$ | Significance <br> Level |
| :--- | :---: | :---: | :---: | :---: |
| Behaviour | 0.9281 |  |  |  |
| W.A.R | 0.6457 | $\mathbf{0 . 2 8 2 4}$ | 132 | $0.000^{* * *}$ |

Based on these results, H2a is not supported.

### 4.2.2 H2b: Consumers' attitudes and actions are not aligned in utilitarian

 purchasesWhen analysing the utilitarian product, represented by mineral water, there is a 0,2336 difference in compared means (See Table 7). This difference is valid on a $1 \%$ significance level. The results signal that the purchases of utilitarian products should not be estimated only through the W.A.R as the model underestimates the actual purchase rate.

Table 7: Paired Samples Statistics: Mineral Water

|  | Mean | Mean <br> Difference | $\boldsymbol{N}$ | Significance <br> Level |
| :--- | :---: | :---: | :---: | :---: |
| Behaviour | 0.8882 |  |  |  |
| W.A.R | 0.6546 | $\mathbf{0 . 2 3 3 6}$ | 95 | $0.000^{* * *}$ |

Based on these results, H2b is supported.

### 4.2.3 H2c: Consumers' attitudes and actions are not aligned in impulse purchases

For the impulse purchases, represented by chewing gum, there is a significant difference of 0,1972 between the applied estimation model and behaviour (See Table 8 ). This is valid on a $1 \%$ significance level. The results show how intended and carried out actions differ within this product category and implies that the behaviour, when it comes to impulse purchases, are not properly estimated through the W.A.R. Within this product category, the W.A.R underestimates actions.

Table 8: Paired Samples Statistics: Chewing Gum

|  | Mean | Mean <br> Difference | $\boldsymbol{N}$ | Significance <br> Level |
| :--- | :---: | :---: | :---: | :---: |
| Behaviour | 0.9646 |  |  |  |
| W.A.R | 0.7675 | $\mathbf{0 . 1 9 7 2}$ | 41 | $0.000^{* * *}$ |

Based on these results, H 2 c is supported.

### 4.2.4 H2d: Consumers' attitudes and actions are aligned in planned purchases

The planned purchase, represented by toilet paper, has a difference in compared means of 0.1715 , on a $1 \%$ significance level (See Table 9). This implies that planned purchases cannot be accurately estimated through the W.A.R since the purchase rate is underestimated in the model.

Table 9: Paired Samples Statistics: Toilet Paper

$\left.$|  | Mean <br> Difference |  |  | $\boldsymbol{N}$ |
| :--- | :---: | :---: | :---: | :---: | | Significance |
| :---: |
| Level | \right\rvert\,

Based on these results, H2d is not supported.
The results from the paired samples t-tests indicate that there is a difference between the Wallet Allocation Rule estimation of behaviour and the actual observed behaviour. This is the case for all four investigated product groups, irrespective of the purchase characteristics. The observed difference in means show how the W.A.R model underestimates the actual share of wallet that customers spend on their highest ranked brand and, as a result, over-estimates the second ranked brand.

### 4.3 Exogenous variables and influence

The behavioural variable was initially applied as the independent variable, which resulted in no significant results. This is caused by the fact that many respondents have purchased the same brand multiple times, resulting in a variable with low differences between responses. To develop the analysis further, the intentional and loyal metrics are introduced as independent variables in order to connect to the hypotheses. From the Theory of Reasoned Action, it is evident that customer attitude influence intention to purchase. This variable is therefore applied as the independent variable for pre-purchase estimates in the following regression analyses. The variable for intention is denoted as 'Juster', since it is defined through the Juster scale questions. This variable represents the intentions that actually lead to purchases. The variable for loyalty is
denoted as 'NPS', since it is based on the probability to recommend. This variable represents the reported loyalty that follows from an actual purchases.

The intention to purchase is achieved in advance, whereas the loyalty measure is achieved in arrears. This gives a full view of both the pre-purchase influencers and the post-purchase influencers. To present valid results, all significance levels below $10 \%$ are excluded from the models. In addition, all models are presented with minimal multicollinarity (See Appendix 7 and Appendix 8).

The $R^{2}$ values for the following regressions are presented in part in Appendix 7 and Appendix 8. These values are low on a general level for the pre-purchase analyses, where the Juster scale is applied as the independent variable. This means that other variables can predict purchasing behaviour better, but since the investigated values have an explanatory power, the regressions are presented and based on the significance levels, they are relevant in explaining pre-purchase estimates in the form of intentions. On the same note, the $\mathrm{R}^{2}$ values for the post-consumption phase, with NPS as the independent variable, have higher predictable power.

Estimation models that measure intended behaviour will be put in relation to actual performed acts in the form of purchasing. This approach is taken in order to connect intentions to actions and to assess behavioural loyalty. Post-purchase intentions are estimated through loyalty metrics, in the form of NPS. The connection to actual behaviour is maintained through measuring how prone a consumer is to recommend the brands that have been purchased and observed in the actual behaviour variable. The numbers are then weighted according to the actual share of wallet that the specific brand has in order to analyse the relationship on an aggregate level.

### 4.3.1 H3: Pre-purchase intentions that lead to purchases are primarily influenced by economic and in-store factors

The following models regress the defined variables on purchase intention, in the form of Juster scales. This provides further insights to how intentions lead to actual purchases and how these intentions can be influenced to increase brand specific sales through continuous predictor variables.

On an aggregate level, five dependent variables have a significant effect on intentions: Quality, Price, Promotion, Habit and Preference (See Equation 1). Quality is proven to be the most
influential factor with a beta value of 0.439 . This implies that, from a theoretical viewpoint and with all other factors unchanged, as quality increases by one score point, the aggregate intention to purchase increases by 0.439 score points. The $B_{0}$ value, 0.370 , implies that if all independent variables are ranked zero, the intention to purchase would theoretically be ranked 0.370.

Equation 1: Regression, Aggregate intention to purchase

$$
\begin{aligned}
\text { Juster }_{\text {All }} & =0.370+0.439 * \text { Quality }+0.270 * \text { Price }+0.137 * \text { Promotion }+0.191 \\
& * \text { Habit }+0.357 * \text { Preference }
\end{aligned}
$$

The presented regression, Equation 1, shows a tendency towards support for H3. This is based on the fact that two of the five independent variables are defined as economic, while one factor is defined as an in-store factor: promotion. This indicate that intention to purchase is primarily influenced by economic and in-store variables. In order to provide managerial insights, this hypothesis will also be tested through regression analyses on the product categories previously discussed.

In the hedonic product category, purchase intention is influenced by the quality, the price and the preference for the brand (See Equation 2). Consumers, hence, have a higher intention to purchase brands in hedonistic product categories that have a high quality, a low price and is the preferred brand in that specific category. The latter is proven to be the most influential factor with a beta coefficient of 0.533 . This represents the difference in the predicted value of purchase intention for each one-unit difference in preference, given that the other variables are the same.

Equation 2: Regression, Utilitarian intention to purchase

$$
\text { Juster }_{\text {Chocolate }}=0.588+0.412 * \text { Quality }+0.478 * \text { Price }+0.533 * \text { Preference }
$$

The intent to purchase in the investigated utilitarian product category, mineral water, is influenced by the quality of the product and the preference within the product category. The highest influence comes from the preference, with a beta value of 0.85 , versus the quality with a beta value of 0.463 (See Equation 3). This implies that the intent for utilitarian purchases is influenced by quality, but mainly by preferred brand.

Equation 3: Regression, Utilitarian intention to purchase

$$
\text { Juster }_{\text {MineralWater }}=0.925+0.462 * \text { Quality }+0.85 * \text { Preference }
$$

The impulse purchase intention is highly influenced by the perceived quality and habit. Habitual behaviour in an impulse situations increases intention, with a beta value of 0.739 , whereas the perceived quality has a causal influence with a beta of 0.935 (See Equation 4). The overall availability in-store, assessed with perceived ease of acquiring the specific brand, has a negative influence over intention with a beta coefficient of -0.503 .

Equation 4: Regression, Impulse intention to purchase

$$
\text { JusterChewingGum }=1.389-0.503 * \text { Availability }+0.935 * \text { Quality }+0.739 * \text { Habit }
$$

For planned purchases, the brand choice in-store is influenced by the price, with a beta value of 0.547 , and promotional offers, with a beta value of 0.53 (See Equation 5). $\mathrm{B}_{0}$ is 1.471 , indicating that if both price and promotion ranks zero, the intention to purchase would theoretically be ranked 1.471 by respondents.

Equation 5: Regression, Planned intention to purchase

$$
\text { Juster } \text { ToiletPaper }=1.471+0.547 * \text { Price }+0.53 * \text { Promotion }
$$

These presented regression analyses show how purchase intentions for the brands that are actually purchased are influenced by different factors depending on the different characteristics of the product category. In all categories, the number of economic and in-store factors that influence purchase behaviour is higher or equal to cognitive factors. Preference is shown to be the cognitive factor that influences intention to purchase within most purchases. Based on these results, H3 is supported in all categories.

### 4.3.2 H4: Post-purchase behavioural loyalty is primarily influenced by cognitive factors

Post-purchase influence provides further insights to how the presented variables influence behavioural loyalty and likelihood to recommend. On an aggregate level, five significant independent factors are identified: Recognition, Quality, Price, Trust and Preference (See Equation 6). Recognition has a negative beta value of -0.166 , while the remaining four variables are positive. The highest positive beta value is quality, 0.667 .

Equation 6: Regression, Aggregate behavioural loyalty

```
NPS All \(=0.852-0.166 *\) Recognition \(+0.667 *\) Quality \(+0.209 *\) Price \(+0.384 *\) Trust
    +0.322 * Preference
```

The presented regression on behavioural loyalty shows how behavioural loyalty, at an aggregate level, is influenced by primarily cognitive factors. This shows support for H 4 .

Additionally, the following equations will present a causal relationship of the influencing variables on probability to recommend within each of the defined product categories. The hedonic product category, chocolate, is influenced by the price/quality ration, the amount of trust and preference (See Equation 7). The respondents, hence, are more likely to recommend a purchased utilitarian product that has a high quality in relation to the price, that they trust and prefer over other brands. The other researched variables did not have a significant causal effect on the loyalty of the purchased products.

## Equation 7: Regression, Hedonistic behavioural loyalty

$$
N P S_{\text {Chocolate }}=0.2699+0.448 * \text { PriceQuality }+0.31 * \text { Trust }+0.386 * \text { Preference }
$$

In the utilitarian category, mineral water, good quality, a low price and trust in the brand influence the behavioural loyalty patterns. The quality is proven to be the most influential factor upon loyalty, with a beta value of 0.738 (See Equation 8). The respondents are more likely to recommend a purchased product and perform the action where the utilitarian product is of high quality.

Equation 8: Regression, Utilitarian behavioural loyalty

$$
N P S_{\text {MineralWater }}=0.271+0.738 * \text { Quality }+0.224 * \text { Price }+0.386 * \text { Trust }
$$

Purchases made within the impulse category, chewing gum, has three independent influencing variables: price, quality and preference. The price has a negative explanatory power with a beta value of -0.467 , which indicates that recommendations for products purchased on impulse are not dependent on keeping a low price (See Equation 9). On the other hand, the price and quality ratio has a high explanatory causal effect with a beta value of 1.019 , indicating that the price in relation to the quality is of high importance for the loyalty score. Impulse products that have a high quality in relation to the price will, hence, have a higher loyalty for purchased products.

## Equation 9: Regression, Impulse behavioural loyalty

$$
N P S_{\text {ChewingGum }}=0.366-0.467 * \text { Price }+1.019 * \text { PriceQuality }+0.824 * \text { Preference }
$$

The behavioural loyalty metric, in this case represented by the NPS for purchased products, has the most dependent variables when it comes to the planned purchase. For the applied planned purchase product category, toilet paper, five variables have explaining power: recognition, quality, price, trust and preference (See Equation 10).

Quality is proven to have the highest explanatory power for planned purchases, with a beta value of 0.665 . Preference has a high explanatory power when it comes to loyalty of purchased brands. As respondents prefer a specific brand in their planned purchases, the loyalty score increases. The beta value of this variable is 0.426 .

## Equation 10: Regression, Planned behavioural loyalty

```
\(N P S_{\text {ToiletPaper }}\)
    \(=1.405-0.303 *\) Recognition \(+0.655 *\) Quality \(+0.307 *\) Price +0.229
    * Trust +0.462 * Preference
```

These regressions show how behavioural loyalty for purchased brands is influenced by different factors depending on the different characteristics of the product category. All regressions show how cognitive factors are influencing in each product category. For the utilitarian and impulse categories, the number of cognitive factors are fewer. Therefore, H4 is not fully supported within these categories. On an aggregate and overall level, H4 is though, supported.

### 4.4 Concluding results

All hypotheses have been investigated, resulting in both supported and not supported hypotheses. These are all displayed in Table 10.

Table 10: Hypotheses results

|  | Hypothesis | Outcome |
| :---: | :--- | :---: |
| $\boldsymbol{H 1}$ | Consumers' attitudes and actions are not aligned on an <br> aggregate level | Supported |
| $\boldsymbol{H 2 a}$ | Consumers' attitudes and actions are aligned in hedonistic <br> purchases | Not supported |
| $\boldsymbol{H 2 b}$ | Consumers' attitudes and actions are not aligned in utilitarian <br> purchases | Supported |
| $\boldsymbol{H 2 c}$ | Consumers' attitudes and actions are not aligned in impulse | Supported |


|  | purchases | Not supported |
| :---: | :--- | :---: |
| H2d | Consumers' attitudes and actions are aligned in planned <br> purchases | Supported |
| H3 | Pre-purchase intentions that lead to purchases are primarily <br> influenced by economic and in-store factors | Supported |
| H4 | Post-purchase behavioural loyalty is primarily influenced by <br> cognitive factors |  |

## 5. Analysis

This part of the thesis will connect theory and empirical data in order to explain the effects from the study. The analysis of consumers' attitude and behaviour will be divided into three categories, 1) aggregated level, 2) category level and 3) influencing exogenous variables. These parts will then be combined in a concluding part of the analysis.

### 5.1 Aggregate level

On a general level, it is clear that the intended behaviour and the actual purchase behaviour differs. The estimation model investigated, the W.A.R, underestimates the actual wallet share that belongs to the top rated brand, leading to faulty estimations. Companies that apply tracking data to understand their customers' behaviour therefore have to reconsider this model.

Through the Theory of Reasoned Action (TRA), it is described how a positive attitude towards a brand does not mean a positive attitude towards performing the act of purchasing the given brand (Ajzen, Fishbein 1975). This theory can in part describe the discrepancy between attitudinal tracking questions and performed behaviour. On a more detailed level, intentions to purchase should accurately estimate behaviour, given that no barriers to act are present.

As the analysis have shown, the W.A.R underestimates actual purchases for the brand with the highest share of wallet. This implies that the second most purchased brand is overestimated in the model. For brands that are ranked lower in the consumer's consideration set, there is a huge Potential-of-Wallet (Brich, Trojan \& Palaci 2013). In order for companies to utilise this opportunity, the product category in which they are active have to be fully understood and actions should be taken accordingly. These actions will be described below.

### 5.2 Category level

Two of the four category connected hypotheses were accepted. All four will hereafter be discussed in relation to relevant introduced theories.

The hedonistic purchases should align with top-of-mind, based on the notion of indulgence and preference. There is a bigger possibility that consumers will choose a brand they prefer, since they know that the specific brand will fulfil the purpose and have the effect the consumer is after. The decision making can be considered to be based on humanistic approaches for this type of product as it involves emotional experiences from the brands to a higher extent. There is a bigger opportunity for consumers to choose a brand that is top-of-mind, considering that hedonistic purchases tend to zone out other, less valued alternatives in store. The information search, hence, is lower than for purchases that are less hedonistic, leading to consumers purchasing preferred brands that are high in their consideration set and especially top-of-mind (Hirschman, Holbrook 1982). Based on these arguments, there should be low discrepancy between the W.A.R and behaviour as top-of-mind and consideration set are the two variables for estimation within the model. The fact that the hypothesis is not supported can be connected to the theory of trying, where intentions and trying to act is not the same as actually acting upon the attitudes.

In the utilitarian product category, the attitudinal estimation is, as hypothesised, different from actual behaviour. As the theory previously stated, utilitarian purchases are aimed to fulfilling a basic need, where attitude towards the brand might not be the same as the attitude towards purchasing that brand if another brand is considered to fulfil the basic need better (Hirschman, Holbrook 1982). This results in a different outcome than attitude might predict. Purchases within this type of category are more often based on cognitive/rational approaches as they are based on rational thinking about quality and price.

The impulse purchase has a shorter cognitive/rational decision model over all (Bray 2008), which can explain the difference in survey response and actual purchased brand. Since the W.A.R model is based solemnly on rank and number of brands in the consideration set, the instore need recognising factors have a high influential power over brand choice. The attitude towards a brand before entering the store can, hence, change based on promotional offers, displays or other factors. The consumer decision making model has a time-limited information
search, leading to faster decision making. In addition, the need recognition is caused by factors in-store, leading to different evaluation criteria than if the need is recognised before entering the store. These factors can, in part, explain the difference in attitude and action for the impulse purchases.

Planned purchases are different from attitudes. This can be explained through the consumer decision model where information search is introduced (Bray 2008). For planned purchases, the need recognition occurs before entering the store. The evaluation of alternatives and brand decision, however, occurs in-store where the actual brand choice is made. The difference between attitude and action can be described through this phenomena, where the distance between need recognition and brand decision is longer.

### 5.3 Influencing Exogenous Variables

In order to utilise opportunities to increase share of the customers' wallets, category specific actions should be taken. The influencing variables which should be taken into account when increasing share of wallet are connected to the purchase intention and behavioural loyalty, based on the notion that experienced satisfaction with a brand leads to loyalty and propensity to recommend (Reichheld 1993). Attitudinal loyalty is created through emotions towards a brand and is conceptualised as satisfaction experienced in the post-consumption phase, which can be connected to behavioural loyalty when measured in close proximity to the actual purchase.

On an overall level, no major barriers to purchase were identified. In the pre-consumption phase, it is shown how economic and in-store factors influence the purchase, while the postconsumption phase is influenced by mainly cognitive factors (See Figure 7).

Figure 7: Aggregate purchases: influencing variables

| Pre-purchase | Purchase | Post-purchase |
| :--- | :--- | :--- |
| - Quality |  | - - Recognition |
| - Price | - Quality |  |
| - Promotion | - Price |  |
| - Habit | - Trust |  |
| - Preference | - Preference |  |

Collectively, purchases are influenced by economic and in-store factors such as price, promotions and perceived quality. Consumers purchase products that have a low price, are connected to a promotional offer and have a high perceived quality. This can be connected back to the Theory of Buyer Behaviour, where stimulis influence intention to act (Howard, Sheth 1969). The perceived quality as put forth by advertising through the symbolic stimuli and experienced quality in previous purchases through significative stimuli play a big part in increasing the purchase probability for purchases that are actually carried through.

In the Theory of Planned Behaviour, factors that are outside of the consumer's control influence behaviour (Ajzen 1991). This strengthens the notion that promotional offers have an influence over purchases in the pre-purchase phase.

Loyalty is influenced negatively by recognition. This can be connected to the pre-purchase factors since promotional offers and economic factors influence purchasing behaviour. As these factors influence intention to act, other effects than recognition lead to a purchase. As such, new products can enter the consumer's evoked set and create satisfaction as no expectations on brand performance exist, leading to over-delivery. Where no expectations on a brand's performance exist, the experience will always exceed the expectations.

Most FMCG does not have an extensive decision model (Bruin, Greenwald \& Maison 2004). As the purchasing behaviour and depth of decision model differs between product categories depending on its characteristics, these will be discussed in part in order to deliver valid conclusions and managerial insights.

### 5.3.1 Hedonistic

Purchase intention and loyalty in the hedonistic product categories are characterised by brand preference (See Figure 8). This can be put in relation to the Theory of Reasoned Action, where the preference within the product category is stated to have an influencing effect on the purchasing act (Ajzen, Fishbein 1975). As a result of this preference, consumers engage in Limited Problem-Solving and unconscious screening of all brands within the category (Foxall 1991). This screening occurs since the consumers notice brands in-store that they recognise from earlier experiences or have been exposed to in general. Companies that want to increase their
sales within the hedonistic product categories should therefore, initially, aim to become part of the consumer's evoked set.

Figure 8: Hedonistic Purchases: Influencing variables


The next step to loyal behaviour is to increase the brand's trustworthiness towards its customers. This can be achieved in the post-purchase phase, where expectations and experiences should be aligned to create satisfaction and trust. By using a sincere and genuine communication plan, expectations are kept to what the brand actually delivers, leading to trust towards the brand. It is, hence, important to not amp up expectations to sky-high levels where the delivery cannot be followed through.

The post-purchase phase plays an important role in generating re-sales. From a humanistic approach to consumer behaviour, the Model of Goal-Directed Behaviour, the desire to purchase a specific brand in highly influenced by the previous experience (Bagozzi, Perugini 2001). The desire, in turn, influences the intention to act which influences the actual purchasing behaviour. Within hedonistic product categories, the desire to purchase generates sales.

Another route to increasing share of wallet is to increase the consumers' category spending. Instead of trying to obtain a bigger slice of the pie, the pie is increased (Brich, Trojan \& Palaci 2013). For utilitarian categories, this means to increase indulgence. The actual spend within hedonistic categories is, though, dependent on a good economic state and that all essential goods can be acquired before spending money on hedonistic products.

For the hedonistic products, preference is important for both intention and loyalty (See Figure 8). In order to increase actual share of wallet through intention and loyalty, focus should therefore be on increasing the post-purchase experienced satisfaction.

The problem-recognition for hedonistic brands is highly connected to indulgence. Where other purchase planning processes are dependent on first defining the product that fulfils the need, the need to indulge is different. To satisfy this need, it is suggested that specific brands are considered in the initial phase of planning, instead of firstly defining the product category. This implies that the significative stimuli plays an important part in the consumer decision model since the brand specific attributes are of high importance (Howard, Sheth 1969). This is strengthened by the fact that 'Preference' is important in both the pre-purchase phase and the post-purchase phase.

### 5.3.2 Utilitarian

Utilitarian products are purchased in order to fulfil a specific need. The act of purchasing is therefore dependent on the perceived quality of the product and the customer's assessment of the possibility of fulfilling the need through purchasing a specific brand. Through a cognitive/rational view and the Consumer Decision Model, it is clear that each purchase is influenced by information search (Howard, Sheth 1969). When it comes to utilitarian products, the problem recognition is key.

In cases where the consumer has little or no knowledge about a utilitarian product category, the information search will be extensive in order for the consumer to properly determine quality. In cases where the consumer has a lot of knowledge about a utilitarian product category, the focus will be on experienced quality and trust, resulting in limited information search (See Figure 9).

Figure 9: Utilitarian Purchases: Influencing variables


The quality and preference increases intention to purchase, for products that are actually purchased. The loyalty is thereafter influenced by the perceived quality and the trust in connection to preference.

### 5.3.3 Impulse

For product categories that are characterised by impulse purchasing, the consumers are more loyal to brands that they have experienced as satisfying their impulse need. Loyalty is based on experience, and preference is based on good experiences from the specific brand. Since the information search is highly time limited for purchasing this product, the consumers rely on previous experience and put less decision power on the actual price level, though the price/quality ratio is of importance. Products with a low perceived quality and high price will not generate loyal behaviour, whereas a high quality product can generate sales irrespectively. The signalling effect that a higher price can have, signalling a higher quality, is important for impulse purchases.

For impulse purchases, the problem recognition occurs in-store. Products that are purchased on impulse are therefore considered to be influenced by promotions in-store. The results do not show any effect from promotional activities on the measured behavioural loyalty, contradictory to what the theories have suggested. The discussed theories indicate that promotional strategies and switching barriers can lead to false loyalty and a peak in sales for a short time-period (Jones, Sasser 1995). By merely looking at the behavioural loyalty, and not stated loyalty, the effects of promotions may generate sales and increases revenue.

Figure 10: Impulse Purchases: Influencing variables

| Pre-purchase | Impulse <br> Purchase | Post-purchase |
| :---: | :---: | :---: |
| - - Availability <br> - Quality <br> - Habit |  | - - Price <br> - Price/Quality <br> - Preference |

The price/quality ratio does, however, have an effect upon measured loyalty for impulse purchases, suggesting that a product with a high perceived quality that is a temporarily promotional good will have a better ratio, hence, increase loyalty in the short run.

The impulse purchases are influenced, in a negative way, by availability (See Figure 10). This shows how intentions to purchase cannot lead to an actual purchase since the brand requested is
not available. The brand requested is purchased based on habit and quality but is hindered by instore purchasing barriers. These purchases are, as mentioned, influenced by habitual behaviour, where the brand chosen is selected due to habits. This can be connected to the levels of problemsolving, where impulse purchases are influenced by routine problem-solving.

### 5.3.4 Planned

Planned purchases have a longer process from need recognition to actual purchase. The consumer decision process for planned FMCGs is not solemnly dependent on a longer information search process, but tend to be connected to time barriers to a higher extent. The time between realising a need, to going to the store is what makes the decision process, from need recognition to purchase, a bit longer.

Planned purchases are defined on a shopping list where all relevant planned purchases are noted. These lists are not brand specific, but tend to define a purchase within a product category, leaving the choice of which brand to purchase as an in-store activity. The size of consumers' wallets are, hence, determined before entering the store, but the brand specific shares can still be influenced.

The influencing factors upon behavioural loyalty for planned purchases can all be connected to the will to make a good deal. The preference and trust for the brand builds influence within the significative stimuli, creating a perceived connection to the brand in question (See Figure 11). On the other hand, price plays a big part in brand choice in-store whereas perceived quality of the brand creates preference.

Recognition is negative in the post-purchase phase, which can be explained by the strong emphasis on preference and quality. Even though a brand is recognised, it does not mean that the attitude towards that brand is positive nor that the quality is high. It can even be interpreted as negative for famous brands as they are not the preferred brands. Due to the desired high quality of planned goods, the consumer might deem previously purchased brands as unfulfilling quality wise, leading to a negative influence from recognition on behavioural loyalty. The negative causal effect of recognition can, based on the described arguments, be interpreted that recognised brands are generally well-known and that consumers do not feel the need to endorse their purchased brand in the utilitarian categories.

As consumers become more and more used to their preferred brand and have trust in that producer, the problem-solving becomes routine (Foxall 1991). Even though the problem recognition occurs before going to the store, the information search and brand choice will be conducted in-store. The time barrier to purchase does, hence, only decrease marginally.

Figure 11: Planned Purchases: Influencing variables

| Pre-purchase | Planned Purchase | Post-purchase |
| :---: | :---: | :---: |
| - Price <br> - Promotion |  | - - Recognition <br> - Quality <br> - Price <br> - Trust <br> - Preference |

The pre-purchase influencers are Price and Promotion. The intentions that lead to purchases are influenced by these two factors, leading to a decision based on economic factors. In the postpurchase phase, it is shown how the level of recognition for brands influences the loyalty in a negative way. These two factors lead to one insight: solemnly relying on economic factors as a basis for purchase can lead to negative loyalty since the expectations and experience of the brand are different.

### 5.4 Concluding analytical remarks

The influencing variables for the pre-purchase phase are mainly economic and in-store factors (See Table 11). By applying the measure for purchase intention adapted from the Juster scale and taking product mix variables into account, behaviour can accurately be predicted. This requires insights to the product category, competitors' actions and market environment.

Table 11: Influencing variables in the Pre-purchase phase

|  | Variables | Aggregated <br> level | Hedonistic | Utilitarian | Impulse | Planned |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Cognitive | Recognition |  |  |  |  |  |
|  | Preference | X | X | X |  |  |
|  | Habit | X |  |  | X |  |


|  | Trust |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Economic | Quality | Price | X | X | X | X |
|  | PriceQuality |  | X | X |  |  |
|  | Offer |  |  |  | X |  |
|  | Promotion | X |  |  |  |  |
|  | Availability |  |  |  |  |  |

The influencing variables for the post-purchase phase are mainly cognitive, with the influence of brand quality (See Table 12). Loyalty metrics can to some extent predict behaviour given that external powers in the form of competitors and market circumstances, and internal powers in the form of product characteristics are fully understood. By adapting the current loyalty metric, NPS, to include quality and price, behaviour can more accurately be understood.

Table 12: Influencing variables in the Post-purchase phase

|  | Variables | Aggregated <br> level | Hedonistic | Utilitarian | Impulse | Planned |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Cognitive | Recognition | X |  |  |  | X |
|  | Preference | X | X |  | X | X |
|  | Habit |  |  |  |  |  |
|  | Trust | X | X | X |  | X |
| Economic $\boldsymbol{C}$ | Quality | Price | X |  | X |  |
|  | Promotion |  | X |  | X | X |
|  | PriceQuality |  | X |  | X |  |
|  | Offer |  |  | X |  |  |
|  | Availability |  |  |  |  |  |

Companies have to properly understand their product and market in order to increase their share of wallet, at an individual level, and market share at an aggregate level. The actions described above should therefore be taken to increase what really matters: sales.

Within both the hedonistic and utilitarian categories, intentions that lead to actual purchases are influenced by preference. The preferred brands therefore have a higher probability of being chosen in-store, irrespectively of the purpose for the purchase.

## 6. Discussion

In the previous chapter the results were explained in relation to previous research. This section will explain the results in combination with the purpose of the thesis. This approach will provide insights to how companies, marketers and tracking firms can handle the discrepancy between attitude and action. Further, implications and limitations will be discussed in order to provide researchers with valid insights for future research.

### 6.1 Findings

Initially, the discussion will present the findings and connect them to the purpose of the thesis. This is divided into three main parts: 1) the observed difference between attitudinal estimation models and actual behaviour, 2) the influencing variables for both pre-purchase and postpurchase estimates, and 3) a framework for working with tracking data to estimate behaviour.

### 6.1.1 Difference between consumers' attitude and behaviour

There is an entire billion dollar industry that rely on the assumption that consumers' attitudes are the same as their behaviour. By applying attitudinal variables such as 'top-of-mind' to see how the company is doing over time, conclusions are often drawn about future market share. It is proven, however, that these attitudinal metrics are not fully reliable to predict market share on an aggregate level, since the predictability of estimates on share of wallet cannot predict actual behaviour on an individual level.

The purpose of the thesis was to challenge the assumption that consumers' attitude and behaviour are the same. Below, the results will be discussed from both the aggregated level and the category level.

The consumer attitude and behaviour are proven to be different on an aggregate level. The brand tracking that is usually applied is therefore not applicable to fully describe consumer behaviour. Understanding customers and their mind-set is important, but cannot accurately predict actual behaviour. Models that are developed to understand perceptions and attitudes can be applied to understand effectiveness from campaigns, given that the goals are clearly defined, but have to be developed further to assess behaviour.

A focus on actual behaviour gives insights to Share of Wallet on an individual level and market shares on an aggregated product category level. Whereas the first is expensive and complex to obtain, the latter is easier to estimate through market data. Applying market data to this issue does, however, not provide insights to attitudes or intentions, leading to an estimation error.

Predicting behaviour from consumer behavioural models is based on psychology, customer selfperception and environmental perception. This view upon behaviour is therefore different for each person depending on mental pictures, experience and how the surroundings are interpreted. The same applies for attitudinal estimation models, where each consumer has a different view on brand attributes and market influencers. A good approach is therefore to look at the market from an individual level through Share of Wallet and not merely at market shares. As discussed, this data is hard, but definitely not impossible, to obtain.

In addition to looking at the results for the aggregate level and trying to generalise the difference between attitudes and action, the category specific discrepancy is of importance to understand different purchasing behaviours.

### 6.1.2 Influencing variables

The research proves how intentions, which develop into actions, are influenced by exogenous factors such as brand quality, price and preference. Where the intention to purchase is most commonly connected to a product, the actual brand choice is made in-store and is affected by factors in the purchasing environment. In purchases where the problem recognition is made instore, impulse purchases, the intention to purchase a product and brand is more or less simultaneous. Understanding consumer attitude and its connection to behaviour, hence, has two levels: 1) problem recognition, connected to the product category choice and intention to purchase, and 2) brand choice, connected to loyalty and preference.

The problem recognition leads to an intention to purchase a specific product category, whereas the brand choice is done in store. Hedonistic purchases are different from this line of thinking since the need is often fulfilled by a specific brand and not only a product. The purchase of a hedonistic brand is based on indulgence of brand specific attributes which results in a different type of decision process where the product category plays a smaller part.

The pure intention to purchase leads to purchase where a preference for the brand exists, irrespectively of the cause for the purchase. The hedonistic and utilitarian purchase intentions are, hence, similar in this way. Brand preference is based on how well the expectation and experience from the brand align, in comparison to other brands in the consideration set. It is therefore of importance that the product delivers what it promise to deliver, decreasing the risk of unhappy customers.

The planned and impulse purchases have economic factors in common. For planned purchases, the price and promotions lead to purchases but results in negative influence upon loyalty from the level of recognition in the post-consumption phase. Similarly, the price has a negative effect on the loyalty for brands that have been purchased as an impulse purchase. This implies that, irrespectively of the depth of the planning process and time from problem recognition to purchase, a low price can have a negative effect on loyal behaviour. This is a result of consumers basing their brand choice in-store on economic variables, ignoring actual quality related outcomes of this choice.

### 6.1.3 Framework

The results and analysis can be summarised by the following framework (See Figure 12). Tracking data that is applied to understand behaviour should be complemented with relevant economic, in-store and cognitive factors. The measurement of intentions is influenced by economic factors and in-store factors. By applying price, quality and promotional insights to the reported intentions, tracking data can more accurately predict purchase behaviour.

Figure 12: Framework for applying tracking data


The loyalty that follows from a purchase is tracked in many forms, such as satisfaction and the NPS. This measurement should be broadened with cognitive factors and experienced quality with the brand. Many of the cognitive factors are already measured or easy to add in existing brand tracking, such as Preference, Trust and Recognition. These are easy to obtain and will provide a more accurate estimation for actual behaviour than merely looking at loyalty scores.

By focusing on improving the pre-purchase factors, short-term sales can be increased, leading to a time-limited sales peak. By improving the post-purchase factors, loyalty can be increased, leading to long-term sales. The framework can, hence, be applied to obtain higher sales figures, both in the short- and in the long-term.

The results have proven a difference between product groups. Depending on the characteristics of the purchase, different influencing variables have been defined. In order to properly develop a strategy based on tracking data and survey responses, the product group characteristics should firstly be defined and understood. The next step is to apply the tracking data on the presented framework, including the category specific influencing variables in combination with intention to purchase and propensity to recommend. The framework can be adapted to suit each category and is presented, per category, in Appendix 9.

### 6.2 Implication

The next part will discuss the implications for decision makers and managers within retain and tracking companies. These implications are developed for the managers, market researchers and tracking companies that provide this kind of service.

### 6.2.1 Managerial implications

As a brand manager, it is important to obtain numbers on the brand performance in order to defend the marketing budget. Marketing departments require investments to finance advertising and awareness of their brand. As it is hard to put a numerical value on brand awareness, amongst other things, brand tracking is used to maintain insights and to track return on marketing investments. This is a way of providing marketing managers with concrete numbers to defend investments in their area of responsibility.

There is a difference on an aggregated level and in the presented categories on consumer attitude and behaviour. Brand owners need to be aware of this problem when they hire a firm to frequently track how their brand is doing in comparison to their competitors. The tracking firm might offer behavioural estimations through attitudinal survey responses, which has been proven by the results in this study to be inaccurate. The biggest difference in share of wallet is in the hedonistic category, where the mean difference in share of wallet was 28.2 percentages points. If this is automatically converted into predicted market share, an approach many firms use, it will have a huge difference on the interpretation of how reality looks. The lowest difference is on the aggregated level but still, the difference is 11.1 percentage point, which makes a huge difference on a market that is valued to billions of dollars yearly. By possessing this knowledge, managers can make informed decisions in assessing actual behaviour and in selecting valid models to interpret attitudinal and intentional data.

The presented framework should be kept in mind when both tracking brand attitudes and when constructing marketing strategies. Applying this knowledge on the market will allow for an increase in the total Share of Wallet for existing loyal customers, an increase in the brand specific Share of Wallet for non-loyals and an increase in new customers from post-purchase recommendations. All these will result in an increase in sales and market share. It is therefore of importance to properly understand the market, intentions to purchase and loyalty within the category in order to increase what really matters: sales figures.

### 6.2.2 Tracking companies

For the tracking companies, this research shows that the current way of measuring Share of Wallet is inaccurate. Companies such therefore invest in finding new ways to measure Share of Wallet instead of applying the existing estimation models. Finding a new method can create a unique opportunity and possibly create a new standard that will allow for recognition and trustworthiness for the supplier of the innovative model.

It is suggested that the existing models for estimating behaviour are developed to include preand post-purchase factors. As the study emphasises, the pre-purchasing factors are economic and in-store influencers, while the post-purchase factors are cognitive and product quality. The existing intentional measures focus on pure intention to purchase and should, hence, be developed further by applying price, promotional offers and in-store barriers in the model. The
existing loyalty measures focus on attitudinal loyalty. By looking at the same measure and connecting it to cognitive barriers and product quality, as applied in this study, further insights to behaviour are obtained and allows for market opportunities to be identified.

### 6.3 Limitations

This chapter will be about different limitations that could have affected the results of our thesis, and if it was possible would like to have done differently.

### 6.3.1 Categories

There were other categories that were interesting to examine, but were excluded due to insignificant results in the pre-test and after discussion with the partner company, Nepa AB . The chosen categories for the pre-test and main study were categories where Nepa possessed tracking data and had an interest in investigating them as they were already represented in their survey system. A discussion of having more categories than just four was initiated, but due to a small budget, this was the optimal number of categories.

### 6.3.2 Amount of respondents

In total there were 239 respondents that fulfilled the task and answered the survey 5 times. However, as some respondents did not shop in every category each week, the number of respondents in used in the different categories was lower. This might be one of the reason why there were none significant results from the variables test on actual behaviour on an aggregated level. A discussion was initiated with the goal of increasing the amount of respondents, but due to the budget constraints, this was the outcome. Another point that affected the amount of respondents was the incentive offered. The only possible way was to offer the respondents lottery tickets, Trisslotter, that already had a fixed cost of 30 SEK. By answering five times, the respondent got lottery tickets for the value of 60 SEK . In the planning process, the respondents were supposed to answer four times, but that ended up being an uneven payment system.

### 6.3.3 Money spent instead of packages

The study of share of wallet was made of packages instead of money spent. This study was unable to check the real money spent, because of the lack of resources, as mention earlier. Doing a study with money spent is harder for the respondents, resulting in less reliable results. This is
based on the notion that it is harder to remember the actually price of a product bought in the grocery store, compared to the total amount spend in the grocery store. However it is easier to remember how many packages you bought in the store. As previously mentioned, using real money spent involves checking in which store the respondents bought a certain product, since a packages of milk will cost different deepening on where the product is bought. If the product is bought it in big-box format (ICA Maxi, Coop Forum) it will be cheaper than if it was bought in a mom-pop store (7 Eleven, Pressbyrån). The respondents are then required to answer what the price was at that specific store and in which store they bought what products, in order to make a fully accurate calculation. This would have made the survey longer and more complicated, which would have led to a higher cost per respondent and less reliable results.

### 6.3.4 Easter holiday

During this five week period when the study was active, the Easter break was in the middle. This can affect the results in the way that consumers purchase specific products for this specific holiday, they might also buy less frequently and go to another store to buy everything instead of their regular one. They might also be on vacation, where you tend to spend more money on luxury items and they might even forget to answer the survey or rush through it.

### 6.3.5 Budget

As the red thread in most of the limitations was the budget, it needs to be highlighted. The intentions were to make a bigger study by getting additional sponsors from clients of Nepa. Unfortunately, the time spawn of the thesis period made it impossible to get additional sponsor, as this took more time than anticipated. It is estimated by Nepa that it would have taken an additional month to get companies on-board with sponsoring the project. This made the study smaller in terms of both respondents and the length of the questionnaire.

### 6.4 Future studies

This study has checked that there is a difference between consumer tracking and the subsequent behaviour. The next step within research would be to check the real money spent per brand instead of packages, which was applied by this study. By using real money spent, the study would come closer to the reality for sales, where everything in the end is about earning money.

It would be beneficial to test the presented framework within more categories in FMCG so brand owners in that specific category can obtain product group specific insights. As for now, the category characteristics (Hedonistic vs Utilitarian and Impulse vs. Planned) can provide insights to each category in the FMCG industries, given that the category is properly defined within these characteristics.

Another interesting approach would be to make a similar research outside FMCG. The same research approach could be conducted within clothing or home building where the consumers' decision models are longer.

On a general level, it is desirable to increase the amounts of respondents in order to get more data to work with. This can provide researchers with more detailed conclusions in each category. This study can be developed with assessing a mathematical formula to the presented framework. It is suggested to apply a mathematical study and develop a new formula of how to accurately calculate Share of Wallet, based on the presented pre-purchase and post-purchase variables. This would allow for companies to directly assess actions from the reported attitudes, intentions and loyalty scores from a statistically relevant model.

## 7. Concluding remarks

It is desirable, but also expensive, to obtain actual brand specific purchasing data to fully determine wallet share. The currently applied estimation models are therefore economically viable but not $100 \%$ trustworthy. Tracking companies therefore have the opportunity to develop behavioural tracking, on a bigger scale, to deliver valid behavioural results to companies.

Proxys such as intentions and loyalty are applied to make behaviours more tangible, but are not always representable for actual purchasing behaviour due to external influencers. These proxies can be representable if they are assessed in relation to actual purchases and connected to the characteristics of the product category. This can more accurately predict which intentions that actually result in purchases and how attitudinal loyalty metrics are influenced to become behavioural loyalty.

Propensity to recommend can lead to an increase in new customers. Tracking these measures, in relation to purchases, can therefore provide important insights to how the specific brand can increase its sales. An increase in sales can be achieved through increasing the share of wallet for current customers, by creating purchases from intentions to purchase, or by increase its sales to new customers through increasing recommendations. Both the pre-purchase and post-purchase factors are therefore of importance.

This study shows how there are flaws in the currently applied methods of calculating Share of Wallet used by many companies. It is important to be aware of these flaws and not simply accept the models as they are designed today. Even though there are flaws, it is still a good tool to use in order to create an approximate understanding of Share of Wallet in a cheap way. Since respondents usually get paid depending on the time spent finish a survey, the current estimation models are the most efficient way of doing it. It is proven that this approach is not the most accurate and that tracking real behaviour provides more true results but requires higher investments. Future opportunities to develop accurate behavioural tracking can allow for tracking companies to increase their product portfolio and their client companies to obtain accurate behavioural insights.

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## Appendices

## Appendix 1: The Extended Customer Decision Model



Source: Blackwell et al. (2001) through Bray (2008)

Appendix 2: The Extended Theory of Buyer Behaviour


Source: Howard and Sheth (1969)

Appendix 3: The Theory of Trying


Source: Bagozzi, Gurhan-Canli et al (2002) through Bray (2008)

## Appendix 4: The Model of Goal-Directed Behaviour



Source: Bagozzi, Gurhan-Canli et al (2002) through Bray (2008)

## Appendix 5: Survey questions

The questions are translated from Swedish to English in this appendix.
[product category] represents the four different categories: chocolate, mineral water, chewing gum and toilet paper.
[brand] represents the purchased brand within each category

## Part 1: Tracking data

What [product category] brand do you prefer?
$\square$
What other [product category] brands would you consider purchasing?
$\square$
How likely are you to purchase [brand] within the coming four weeks?


Would you recommend [brand] to a colleague or friend?


## Part 2: Journal panel data

Have you purchased [product category] since the last survey?
What [product category] brands have you purchased since the last survey?
How many of each brand have you purchased since the last survey?

## Part 3: Influencing variables data

How well do you think the following fits [brand]?

|  | Sicall |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| brand | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | - |
| Tto purchase tic binad | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | - | - |
| ally purchase iis bisand | - | - | $\bigcirc$ | $\bigcirc$ | - | - | $\bigcirc$ |
| wost tie brand | 0 | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| miliy | 0 | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| Lowprice | - | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
|  | - | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ | - | $\bigcirc$ |
|  | 0 | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |
| The bardis susully on promotionolofotir | - | $\bigcirc$ | - | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ |  |

## Appendix 6: Test of the defined categories

The significance levels are labelled as follows: $*=>90, * *=>95 \%$ and $* * *=>99 \%$.
Paired Samples Statistics

|  | Mean | N | Std. <br> Deviation | Std. Error <br> Mean | Mean <br> Difference | Significance |  |
| ---: | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Chocolate | WAR | 0.6457 | 132 | 0.2148 | 0,0187 | -0.2824 | $0.000^{* * *}$ |
|  | Behaviour | 0.9281 | 132 | 0.1485 | 0,0129 |  |  |
| Chewing | W.A.R | 0.7675 | 41 | 0.2238 | 0,035 | -0.1971 | $0.000^{* * *}$ |
| Gum | Behaviour | 0.9646 | 41 | 0.1174 | 0.0183 |  |  |
| Mineral | W.A.R | 0.6546 | 95 | 0.1728 | 0.0177 | -0.2336 | $0.000^{* * *}$ |
| Water | Behaviour | 0.8882 | 95 | 0.1823 | 0.0187 |  |  |
| Toilet | W.A.R | 0.7696 | 123 | 0.2112 | 0.0190 | -0.1716 | $0.000^{* * *}$ |
| Paper | Behaviour | 0.9412 | 123 | 0.1448 | 0.0131 |  |  |

## Appendix 7: Regression tests for Juster Scale

The significance levels are labelled as follows: $*=>90, * *=>95 \%$ and $* * *=>99 \%$.

| Aggregated level | Unstandardized <br> Beta | Significance | Durbin <br> Watson | R-square |
| :--- | :---: | :---: | :---: | :---: |
| High quality | 0.439 | $0.000^{* * *}$ | 1.790 | 0.184 |
| Low price | 0.270 | $0.006^{* * *}$ |  |  |
| Promotion | 0.137 | $0.059^{* *}$ |  |  |
| Habit | 0.191 | $0.092^{*}$ |  |  |
| Preference | 0.357 | $0.011^{* *}$ |  |  |


| Chewing Gum | Unstandardized <br> Beta | Significance | Durbin <br> Watson | R-square |
| :--- | :---: | :---: | :---: | :---: |
| Availability | -0.503 | $0.083^{*}$ | 2.327 | 0.363 |
| High quality | 0.935 | $0.005^{* * *}$ |  |  |
| Habit | 0.739 | $0.001^{* * *}$ |  |  |


| Toilet Paper | Unstandardized <br> Beta | Significance | Durbin <br> Watson | R-square |
| :--- | :---: | :---: | :---: | :---: |
| Low price | -0.503 | $0.005^{* * *}$ | 1.917 | 0.110 |
| Promotion | 0.935 | $0.001^{* * *}$ |  |  |


| Mineral Water | Unstandardized <br> Beta | Significance | Durbin <br> Watson | R-square |
| :--- | :---: | :---: | :---: | :---: |
| High quality | 0.462 | $0.087^{*}$ | 2.096 | 0.265 |
| Preference | 0.850 | $0.000^{* * *}$ |  |  |


| Chocolate | Unstandardized <br> Beta | Significance | Durbin <br> Watson | R-square |
| :--- | :---: | :---: | :---: | :---: |
| High quality | 0.412 | $0.027^{* *}$ | 1.575 | 0.250 |
| Low price | 0.478 | $0.001^{* * *}$ |  |  |
| Preference | 0.533 | $0.000^{* * *}$ |  |  |

## Appendix 8: Regression tests for NPS

The significance levels are labelled as follows: $*=>90, * *=>95 \%$ and $* * *=>99 \%$.

| Aggregated level | Unstandardized <br> Beta | Significance | Durbin <br> Watson | R-square |
| :--- | :---: | :---: | :---: | :---: |
| Recognition | -0.166 | $0.098^{*}$ | 1.939 | 0.457 |
|  | 0.667 | $0.000^{* * *}$ |  |  |
| Low price | 0.209 | $0.002^{* * *}$ |  |  |
| Trust | 0.384 | $0.000^{* * *}$ |  |  |
| Preference | 0.322 | $0.000^{* * *}$ |  |  |


| Chewing Gum | Unstandardized <br> Beta | Significance | Durbin <br> Watson | R-square |
| :--- | :---: | :---: | :---: | :---: |
| Low price | -0.467 | $0.058^{*}$ | 2.405 | 0.592 |
| Price/Quality | 1.019 | $0.000^{* * *}$ |  |  |
| Preference | 0.824 | $0.000^{* * *}$ |  |  |


| Toilet Paper | Unstandardized <br> Beta | Significance | Durbin <br> Watson | R-square |
| :--- | :---: | :---: | :---: | :---: |
| Recognition | -0.303 | $0.033^{* *}$ | 1.961 | 0.453 |
| High quality | 0.655 | $0.000^{* * *}$ |  |  |
| Low price | 0.307 | $0.002^{* * *}$ |  |  |
| Trust | 0.229 | $0.087^{*}$ |  |  |
| Preference | 0.462 | $0.000^{* * *}$ |  |  |


| Mineral Water | Unstandardized <br> Beta | Significance | Durbin <br> Watson | R-square |
| :--- | :---: | :---: | :---: | :---: |
| High quality | 0.738 | $0.000^{* * *}$ | 1.884 | 0.477 |
| Low price | 0.224 | $0.017^{* *}$ |  |  |
| Trust | 0.570 | $0.000^{* * *}$ |  |  |


| Chocolate | Unstandardized <br> Beta | Significance | Durbin <br> Watson | R-square |
| :--- | :---: | :---: | :---: | :---: |
| Price/Quality | 0.448 | $0.000^{* * *}$ | 2.405 | 0.592 |
| Trust | 0.310 | $0.021^{* *}$ |  |  |
| Preference | 0.386 | $0.000^{* * *}$ |  |  |

## Appendix 9: Framework, applied per category

## Appendix 8a: Framework applied to Hedonistic purchase



Appendix 8b: Framework applied to Utilitarian purchase


Appendix 8c: Framework applied to Impulse purchase


Appendix 8d: Framework applied to Planned purchase


