Does website appeal matter in the B2B market?

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Does website appeal matter in the B2B market?

Master Thesis

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Abstract

This experimental research measures the effects of website appeal in business to business. In particular, we study the effects of website appeal on perceived usefulness and attitude towards the website. Product attitude is proposed to moderate this relationship, since use considerations drive consumer choices. Perceived usefulness and attitude towards the website are proposed to affect purchase probability and net promoter score. Results show appeal only influences perceived usefulness for those who directly benefit from the product. In addition, perceived usefulness positively influences purchase probability and net promoter score. Whereas, attitude towards the website only influences net promoter score. Furthermore, product attitude is observed to have a strong effect on all successive variables.

Executive summary

A recent study by Accenture (2015) among executives of highly successful organisations shows that creating a strong customer experience is of utmost importance, as it received most number one rankings. One of the reasons is that it helps firms in creating revenue. Lemon and Verhoef (2016) argue that a customer experience is created through a myriad of touch points in multiple channels and media. This often results in a complex customer journey which is difficult to mold. One of the ways an organisation can influence this process is through their website. The importance of which is in particular shown by Cotlier (2001), who argues that the first seven seconds are the most crucial because one could turn a prospective customer off within that time period. Everard and Galletta (2005) add to this that the more an individual visits websites, the harder it is to retain the attention of potential customers. It can thus be concluded that websites are key in business. In particular for organisations that are new as their website is likely to be one of the first moments of contact with an individual.

One of the ways a website can be optimised is by choosing a suitable appeal, which according to Kotller (1997) can be seen as the general theme i.e. one of the various strategies to persuade customers. This definition implies a mandatory choice which has to be made by the designer in the sense that one has to decide how to appeal the user. This choice is often dependent on the goals which one wants to achieve with the website. In business, a form of advertising appeal is often applied to attract the attention of potential customers, change their minds about the product, and make them psychologically feel something about the product (Schiffman and Kanuk, 2007; Belch and Belch, 1998). Such an appeal often comprises of a combination of more general appeals. One of the most common and general appeals are rational and emotional appeal (Kotller, 2003). These appeals can also be called attribute and benefit appeal. This is because a rational appeal primarily emphasises the advantages of said product attributes, whereas an emotional appeal emphasises the more abstract values that are derived from the consumption or possession of a product (Hernandez et al., 2014).

Literature generally agrees that use considerations drive consumer choices (Dhar and Wertenbroch, 2000). These considerations cause consumers to have two separate attitudes towards products, i.e. hedonic and utilitarian (Voss et al., 2003). Products primarily characterised as hedonic offer the user more experiential consumption, fun, pleasure, and excitement, whilst utilitarian ones are characterised as primarily instrumental and functional (Dhar and Wertenbroch, 2000; Khan et al., 2005). Generally, literature beliefs that for consumers a rational appeal best fits a primary utilitarian product whilst hedonic products are best suited with an emotional appeal (Johar and Sirgy, 1991; Lin et al., 2014; Zanon and Teichmann, 2016). However, there is some disagreement as multiple authors argue that a moderate mismatch improves effectiveness for utilitarian products (Lim and Ang, 2008; Klein and Melnyk, 2014). This comes right to one of the core problems SmartGoals (the cooperating firm for this research) experiences. More specifically, the executives wonder whether they should adapt their

website to how one would be expected to use the product. This is particularly important for them because their core product is sold to different sports organisations, each of which is expected to use the product differently. The result is an excellent opportunity to research the effects expected product use has on the effectiveness of a website. Especially, as current research lacks insight into the effect of different appeals on business to business (B2B) products and whether these effects hold up when used in website design.

This research comprises of an experimental research design in which website appeal is manipulated for the different markets. As a consequence fifteen different websites have been made. Three different appeals (emotional, mixed, and rational) for five different markets (football, hockey, fitness, physiotherapy, and physical education). The subjects within these markets have been sampled as such to increase the odds that one would have influence in the buying process of an organisation, which however cannot be guaranteed.

In order to determine the effectiveness of a website, it has to be recognised that its effectiveness is a multi-dimensional construct. One which is not easily depicted and depends on the goals which one wants to achieve. In the end, for a firm, this is increased revenue. A measure related to this is the purchase probability scale. The effect of a website appeal may not be directly measurable in terms of purchase probability. For this reason attitude towards the website is used. Especially as it is more dedicated to websites, quantifying the essence of website effectiveness. Therefore, when the appeal of a website changes, also one's attitude towards the website is likely to change. This measure is a widely used one for the effectiveness of a website (McMillan et al., 2003). Generally, attitude towards the website is one's generic perception of how good (or bad) the website is. A good/poor website may signal good/poor product quality to (potential) customers (Baker et al., 1994). Whether or not an organisation is willing to invest in a product does not only rely on one's attitude towards the website alone. There are many other variables that play a role — where perceived usefulness of the product is expected to be one of the more important ones (Davis, 1989; Li et al., 2015). In contrary to attitude towards the website, perceived usefulness measures what is directly related to the product. In addition it is not likely to be reliant upon someone's attitude but more their (logical) reasoning and how persuasive/convincing a message (or website) may be. As a website's persuasiveness may be affected by its appeal, it is proposed that appeal has an effect on perceived usefulness. Both relationships are expected to be moderated by utilitarian and hedonic attitude towards the product. Considering the effects a website might have and its purpose, determining one's interest in the product seems crucial. Therefore, perceived usefulness and attitude towards the website are proposed to affect purchase probability — since for an organisation revenue is most important. Purchase probability is only part of the interest one may have. Especially, as it might be that someone doesn't perceive the product to be useful for them but might be for others. This is measured using the Net Promoter Score (NPS). As a consequence, it is proposed that perceived usefulness and attitude towards the website positively influence net promoter score.

The results show website appeal does not influence perceived usefulness or attitude towards the website. This could be because the websites were not dissimilar enough — more extreme differences may be required by e.g. using more technological features or radically different elements. The type of elements were kept constant as a way to minimize the effects of confounding variables. However, website appeal does influence perceived usefulness for the more direct beneficiaries. These individuals are characterised by a lower influence in the organisational purchasing process. In this case an emotional appeal has been observed to be most effective and mixed appeal the least. This may be explained by using the elaboration

likelihood model (Petty et al., 1983), which describes two different routes an individual may take to attitudinal change or persuasion. The first route, called the central route, is the result of diligent consideration. Whilst the second route to persuasion, the peripheral route, involves the use of (external) cues (or signals). The choice of which route is taken determines what argument (and thus appeal for this research) is most effective. A persons involvement is a major determinant of which route to persuasion is taken. Involvement is here defined as the degree one is concerned with forming a reasoned opinion about the product, and the product itself has some direct personal relevance or consequence. This research has not been controlled for one's involvement. The direct beneficiaries may be characterised as low involved because the personal relevance and/or consequences are not yet known — particularly because the product requires a new way of thinking. Causing a possible explanation as to why for this sub-group appeal is significant. In contrary, appeal is not significant for the indirect beneficiaries — which may be because involvement is mixed. The importance of this for the appeal is shown by literature. More specifically, because Dens and De Pelsmacker (2010) show that high involvement situations are ideal for using an informational appeal, whilst low-involvement situations are best suited for an emotional appeal. Depending on the target audience, one may conclude that a website should contain elements for both routes to persuasion.

This research supports the notion that perceived usefulness and attitude towards the website positively influence net promoter score. Comparing both effect shows that perceived usefulness is more important because it has a higher influence on net promoter score. This notion is additionally strengthened by showing that perceived usefulness positively influences purchase probability. Whereas, attitude towards the website does not influence purchase probability. The importance of these findings for the B2B market is strengthened by the fact that more than half of the respondents (from whom the job is known) can be designated to have a high influence in the buying process. In addition utilitarian is observed to have a significant influence on perceived usefulness and attitude towards the website at the expense of hedonic. These effects are observed to influence perceived usefulness and net promoter score. The effect of utilitarian is, however, not fully mediated by perceived usefulness and/or attitude towards the website because utilitarian also has a direct influence on purchase probability and net promoter score. Given the importance of utilitarian, support to the notion of Batra and Ahtola (1991) is given — as it might be the case that only one component of product attitude is important. In addition, this research does not provide evidence that attitude towards the website influences purchase probability. This in contrary to the finding of Bruner and Kumar (2000), who determined that attitude does have an influence on purchase intention.

Preface

In the search for my master thesis I felt a great urge to make a real contribution to a local business. And I thought what a better way to do this than to cooperate with a start-up. During the search I came across SmartGoals, which from the start really got my interest. As time progressed and my interest grew, I decided to contact them. After meeting with Chris Heger (one of the founders of SmartGoals) it quickly became clear there was a real need. Especially, with regards to improving their website. After some time it became clear that it was possible to help them with their website whilst doing my master thesis. During this project I've learned a lot, more so than I think than I would have in a large company like Philips. For providing me this opportunity I would like to thank Chris in particular. Especially, for his kindness, interest, and keen insights. But also for providing an incentive which could be awarded to one of the respondents of this research. My experience is more than positive, and therefore I would recommend other students also to make the leap and do the master thesis at a small (start-up) company. All of this would also not have been possible without Sarah Gelper. Who, kindly guided me the entire project when needed with an always great spirit and insight. Not one moment that I've regretted my decision to choose her as my mentor. Therefore, I would like to express my sincere gratitude to Sarah.

The experimental set-up of this research required the necessary technical knowledge. Especially with respect to designing a website. Here my knowledge which I gathered at my fathers' company came for a great deal to my advantage since I've helped build and maintain his website. However, in many instances I still wondered how to do some technical things. That is where Sjef Fransen (the other executive of SmartGoals) helped me a lot. For which I am also very grateful. Also I would like to thank Wouter Lambooij because of all the effort he spend on checking the different websites. In addition, I would like to thank Pieter van Gorp for his keen eye on the greater merits of this research, the use of website visitor information, and other clear and constructive feedback. I am particularly grateful for his insights related to the influence different jobs may have because this gave my understanding a new dimension. In advance, I also would like to thank Néomie Raassens for her effort in critically reading through this research.

Furthermore, my gratitude goes to all my friends who helped me with their support. In particular I would like to thank Chiel Smulders for his relentless effort in checking my manuscript. Also I would like to thank Maikel Bergmans, Bas Klaassen, and Rianne te Kaat for their effort in reading and commenting on my research. Also I would like to thank dr. Kevin Voss for providing me additional guidance on how to use his hedonic utilitarian measure as described in Voss et al. (2003). Finally, I would like to thank all of those who participated in this study. Either through a pre-test or in the experiment itself. Especially, to those who provided me great advice or insight. This research has been written using the LaTeXtemplate provided by Joos Buijs.

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Chapter 1

Introduction

This research studies the effects of website appeal in business to business (B2B). In particular the sporting industry. The respondents are active in organisations, which all are potential customers of the cooperating firm. This chapter will start with a brief introduction to the company, SmartGoals (1.1). In order to appreciate the results of this research, knowledge of the customers of SmartGoals is recommended and is therefore briefly discussed (1.2). It has to be noted that this research finds its origin in a organisational problem, which has been lead by an extensive researching effort of both literature and management problem, to this research (1.3). More specifically, because generally B2B literature seems to fall far behind in research effort made (1.4). After introducing the context and focal research questions, a literature review is done to establish a framework. This framework is consecutively used to gain insight into the question at hand (Chapter 2). Using this a method is set-up to gain the insight required (Chapter 3). Execution of this method resulted in a number of observations, for which the basic descriptives are provided. Using these descriptives meaning can be given to the acquired data (Chapter 4). Using different statistical methods this data is subsequently analysed (Chapter 5). Analysing these results gives multiple possible inferences that can be drawn regarding the research questions (Chapter 6). From these implications for research and management are drawn. All of these implications are, however, limited by various aspects such as the available resources. Additionally, future research recommendations are drawn (Chapter 7). When reading this research it has to be noted that this research uses a random order of he and she and the use of both is always implied.

1.1 The company

This research is done in cooperation with SmartGoals which is a small start-up company active in the sports industry. SmartGoals has one product that it sells to organisations and clubs (Figure 1.1). This product uses the concept of gamification which is defined as invoking gameful experiences and other behavioural outcomes using (motivational) affordances in processes to enhance services (Hamari and Koivisto, 2014). The product thus brings a gaming experience to the field which can have many advantages. The product is available in multiple versions depending upon the sport for which it is used. Different versions because each market has distinct requirement that results in different product forms. SmartGoals is currently sold for football, hockey, fitness and physical education. The product that is provided to these markets requires the necessary information as using it demands a novel way of thinking for

the user. The product can, therefore, be posited as somewhat radical (Dewar, R. D., 1986). Consequently, when selling the product an increased amount of knowledge sharing is required to enable potential customers to become interested and buy the product. It is likely that the website is one of the first touch points for the customer with the product. Their website therefore becomes a primary concern.

Figure 1.1: The product for the football market

1.2 The focal firm and its customers

The focal firm operates using distinct types of customers because most different sports require a different product form due to environmental changes. The customer types used are football, hockey, fitness, physiotherapy, and physical education. Note that throughout this article when a notion is made about an individual, potential one is also implied. Most importantly because this research focusses on new customer acquisition using websites.

1.3 The problem and the importance of research

Generally, literature acknowledges the importance of a good website. Not only to promote a product or service, but often also to generate revenue (Chiou et al., 2010). One of the explanations is that, when following signalling theory, website quality can serve as a signal for product quality (Baker et al., 1994). Consequently, an important issue is to maximize the persuasiveness of the website. This is for the focal firm of particular importance as each market (i.e. customer type) uses the product in a distinct form, and likely with a (somewhat) different purpose. Therefore, each customer type is likely to be persuaded differently.

In general, potential customers of SmartGoals are having difficulty getting a clear and positive perception of the cost benefit ratio of the product (Appendix A). A primary concern in this is the website. As generally, customers give the feedback that the website of SmartGoals lacks depth and insight. Additionally, their primary football distributor and seller of SmartGoals in the football market, Preau Sports, also rates this as an important issue that needs fixing. Especially, as they say the current website doesn't facilitate in gaining someone's interest. The complete cause-effect diagram can be found in Appendix A. This diagram has been based on informal conversations with (potential) users and is verified by C.J.J. Heger

MSc., who is one of the company executives. As a consequence, causing SmartGoals to currently be dependent on phone calls and face-to-face meetings in order to sell their product. Therefore, they know what customers need and want to hear in order to sell. However, there is no convergence of knowledge on how to bring this most effectively to the website. Meaning there are various idea's on how to tackle this but it is unknown what is most effective. Therefore, in order to help maximise its effectiveness impartial research is required. This to determine how one's expected product use (i.e. a form of consumer attitude towards the product) influences one's perception of the website and, consequently, the product. This has led to the following problem statement:

Problem statement

SmartGoals has difficulties persuading potential customers when using their website.

1.4 Research gap and questions

Besides being practically guided, this research will mainly address a research gap. A gap that brings the problem and research together, which is website appeal. Research has shown the importance of an appeal, and whether it's suitable for the (potential) customers and how they use the product (Lin et al., 2014; Johar and Sirgy, 1991; Lin et al., 2014; Zanon and Teichmann, 2016; Klein and Melnyk, 2014). However crucial, to the best of our knowledge it has never been researched before what the effect of website appeal is on the interest an organisation might have towards a product, making this research of importance. Therefore, the subsequent research question is stated (1.4.1). Using the literature review, research effects are proposed (1.4.2). Along with these effects sub-research questions are stated in (1.4.3).

1.4.1 Research questions

What effect does a website appeal have on the purchase probability and net promoter score in a B2B context? And what is the moderating effect of product attitude on that relationship?

1.4.2 Conceptual model

In figure 1.2 the proposed conceptual model is depicted. This model shows the proposed effects researched throughout this research. The literature on which this model is based, is discussed in Chapter 2.

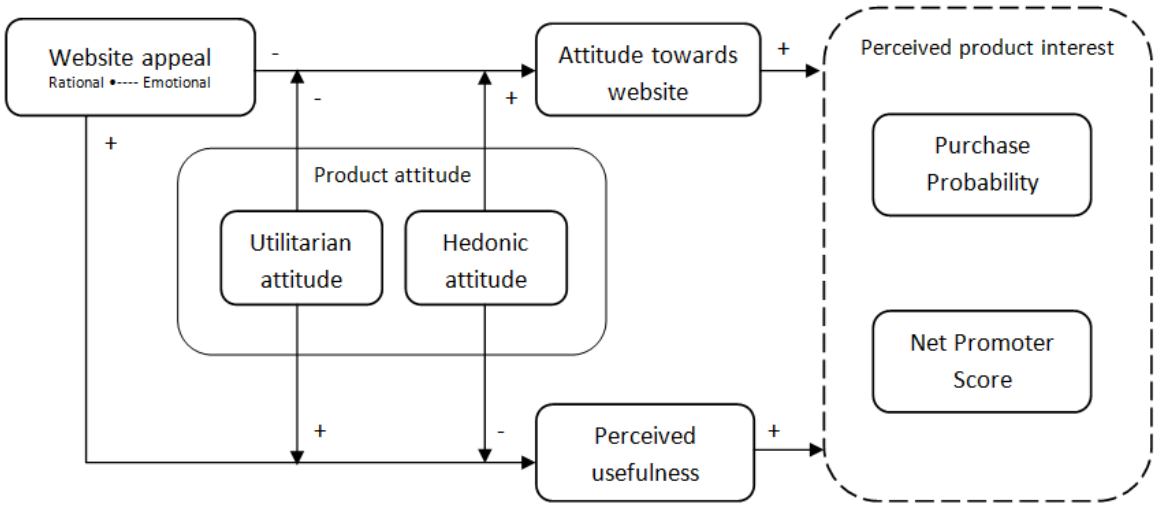


Figure 1.2: Conceptual model

1.4.3 Sub-research questions

This has led to the following sub-research questions:

- How does website appeal influence one's attitude towards the website and perceived usefulness?
- How does product attitude influence the effect of website appeal on the attitude towards the website?
- How does product attitude influence the effect of website appeal on perceived usefulness?
- What is the effect of one's attitude toward a website on the net promoter score and purchase probability?
- What is the effect of perceived usefulness on the net promoter score and purchase probability?

These questions and the proposed effects are the result of a thorough literature review which is subsequently discussed.

Chapter 2

Literature review

Creating a strong customer experience is important as it may help an organisation to create revenue. An important element in creating a strong customer experience is a website (2.1). New brands are likely to be particularly sensitive for this because the potential customer has yet to make up her or his mind about the product. A poor website may therefore cause the permanent loss of a potential customer (2.2). One of the primary decisions a website designer has to take, is which appeal to use. Especially important because this determines the general look and feel of a website. The choice for this research is limited to emotional, mixed and rational appeal because these are generally the most used and clearly distinguished ones (2.3). Whereas, in general a B2B website has distinct properties compared to a business to consumer (B2C) one. In particular because of contextual differences (2.4). This is particularly important when determining the effectiveness of a B2B website. Finally, in order to answer the research question hypotheses are established (2.5). Where it has to be noted that all of these hypotheses are stated in contrast to a mixed appeal.

2.1 Customer journey

A recent study by Accenture (2015) has shown that 'customer experience' received most number one rankings from executives when they were asked about their top priorities within the next 12 months. This shows the importance of the creation of a strong customer experience as a management objective. Especially, since many of these firms are highly successful. A customer experience is created through a myriad of touch points in multiple channels and media. Often resulting in a complex customer journey which is difficult to mold for an organisation (Lemon and Verhoef, 2016). It is believed that positive experiences result in a higher conversion rate i.e. improvements of results on the bottom-line. Lemon and Verhoef (2016) see customer experience as a multidimensional construct that focusses on a customer's cognitive, behavioural, emotional, sensorial, and social responses to the offerings of an organisation during the entire purchasing journey of the customer. Using this definition, the customer experience process can be seen as an iterative process that goes from the pre-purchase phase to the purchase phase, after which it goes to the post-purchase phase. The iterativeness ensures past experiences are incorporated. In every phase the customer can mainly be influenced by four types of (sub) touch points. These are the brand-owned, partner-owned, customer-owned, and social/external/independent (Lemon and Verhoef, 2016).

The brand-owned touch points are those where the interactions with the customer are

controlled and designed by the focal firm. Including all their owned media (e.g., website, advertising, loyalty programs) and elements controlled through their marketing mix (e.g., packaging, product attributes, service, sales force, price, convenience). *The partner-owned touch points* are those that are jointly created, managed, designed or controlled by one or more partners of the firm and the focal firm itself. In this instance a partner is most likely to be a marketing agency, multichannel distribution partner, multi-vendor loyalty program partner, or communication channel partner. *The customer-owned touch points* are those where customer actions are visible. A crucial distinction is that these are not controlled by the focal firm or its partners but by their customers. For example, a product review video on YouTube made post-purchase. Last but not least *the social or external touch points* recognize the important roles of others in the customer experience. Contact with these touch points exerts influence on the affected individual which may be solicited or unsolicited. These are thus external touch points (e.g., other customers, independent information sources, and peer influences).

The strength of each of these (sub) touch points may differ as each customer interacts with these in various ways. Also the nature of the product or service, when it occurs in the overall customer journey and the customers' own experience may yield different strengths of these (sub) touch points. Theoretically causing a brand to have different persuasive powers towards every individual.

2.2 Selling new products with new brands

When an entirely new brand or organisation is founded there are no touch-points yet. Enabling (and requiring) the new brand to entirely form the customer experience from scratch. In such a case, brand-owned and partner-owned touch points may be of crucial importance because that is the only way individuals might get to know the brand. Since SmartGoals is in such an early phase, visiting the website is likely to be one of the first touch-points for many individuals. Consequently, researching and improving their website may have a significant effect as the visitor still has to make up her/his mind about the brand and/or product. Critical in any company are its funds and revenues, but especially so in new ones as there is only a small and limited amount which is often borrowed as well. All the more reason it has to be spend as effective as possible. Wells et al. (2011) have shown websites can be of importance here by showing that website quality has an effect on the purchase intention. Moreover, when following signalling theory, this seems logical because website quality can serve as a signal towards product quality (Baker et al., 1994). Additionally, Dens and De Pelsmacker (2010) have shown that the advertising strategy is especially relevant for new brands as the incorrect use may limit the new products' success. Whereas Saliagas Cox and Locander (1987) argue that for novel products the formation of brand attitudes may depend more heavily on the affective reaction (emotion) to the advertisement than on their brand-related beliefs, which might also be true for their websites. True as a parallel may be drawn here from advertising to corporate websites since Hwang et al. (2003) argues that corporate websites could be seen as advertising. If that is true, it is key to design the website as such to evoke a positive affective reaction. Liu and Arnett (2000) empirically derived four critical aspects for website success in electronic commerce. These four aspects are: (1) information and service quality, (2) system use, (3) playfulness, and (4) system design quality. From these aspects Ranganathan and Ganapathy (2002) also shows the importance of, at least, information content which is a

concern for SmartGoals. Following previously discussed theories, informational content could therefore have an effect on their success and that of other start-ups.

2.3 Website appeal

One of the ways a website can be optimised is by choosing a suitable appeal, which according to Kotller (1997) can be seen as the general theme i.e. one of the various strategies to persuade customers. This definition implies a mandatory choice which has to be made by the designer in the sense that one has to decide how to appeal the user. This choice is often dependent on the goals which one want to achieve with the website. In business, a form of advertising appeal is often applied to attract the attention of potential customers, change their minds about the product, and make them psychologically feel something about the product (Schiffman and Kanuk, 2007; Belch and Belch, 1998). Such an appeal often comprises of a combination of more general appeals. One of the most common and general appeals are rational and emotional appeal (Kotller, 2003). These appeals can also be called attribute and benefit appeal. This is because a rational appeal primarily emphasises the advantages of said product attributes, whereas an emotional appeal emphasises the more abstract values that are derived from the consumption or possession of a product (Hernandez et al., 2014). As appeal reflects the general theme in how a potential customer is persuaded, it may consist of various elements. Each of which will have its distinct influence on how the appeal is perceived by an individual. One of the more important elements is the message strategy. Van Dessel (2007) argues message strategy is key to building and sustaining strong brands. For a rational appeal the message strategy leans thus more towards the factual whilst for emotional appeal it leans more towards linking emotion to the attributes. Such as by using figurative language. Gibbs et al. (2002), among others, has shown the use of figurative language in interpersonal communication is positively correlated with emotional intensity. Meaning for this research that the use of figurative language could be part of an emotional appeal (Kronrod and Danziger, 2013). In order to get a more complete depiction of the elements that could be used for a specific appeal, table 2.1 can be consulted. However, it has to be kept in mind that this table is not likely to be an exhaustive list which contains all possible elements that can be used. Especially, since there is a seemingly infinite number of things one could do to achieve the desired appeal.

Lin et al. (2014) have shown that product type is of paramount importance because it moderates the relationship between advertising appeal and advertising effect (which is a combination of factors amongst which is purchase intention). However, it is for this research of somewhat lesser importance since only one product is researched. Lin (2011), additionally, proofs that advertising appeal has a significant effect on advertising attitude, which is the attitude held by consumers caused by the advertisement. Whereas, a rational approach has a more significant positive effect in comparison to an emotional one. Note, that the study of Lin was done using a high involvement product, possibly limiting the generalizability.

Literature generally agrees that use considerations drive consumer choices (Dhar and Wertenbroch, 2000). These considerations cause consumers to have two separate attitudes towards products, i.e. hedonic and utilitarian (Voss et al., 2003). Products primarily characterised as hedonic offer the user more experiential consumption, fun, pleasure, and excitement, whilst utilitarian ones are characterised as primarily instrumental and functional (Dhar and Wertenbroch, 2000; Khan et al., 2005). Generally, literature beliefs that for consumers a rational

appeal best fits a primary utilitarian product whilst hedonic products are best suited with an emotional appeal (Johar and Sirgy, 1991; Lin et al., 2014; Zanon and Teichmann, 2016). However, there is some disagreement as multiple authors argue that a moderate mismatch improves effectiveness for utilitarian products (Lim and Ang, 2008; Klein and Melnyk, 2014).

This makes for an interesting topic. Especially, as current research lacks insight into the effect of different appeals on business to business (B2B) products and whether these effects hold up when used in website design. One of the few insights related to the B2B market, shows that a rational appeal should be included in case of print ads (Lohtia et al., 1995). Additionally, no research seems to have been done by mixing emotional and rational appeals. Furthermore, appeal hasn't been found to be researched in website conditions. Adding this to research would naturally enrich the B2B literature, as it seems to be far behind the B2C counterpart (Lilien, 2016).

Table 2.1: Possible elements to be used on the site to promote a specific appeal

Element	Emotional/Rational	Source
Message appeal	Emotional/Rational	Zanon and Teichmann (2016)
Figurative language i..e use symbolic messages	Emotional	Kronrod and Danziger (2013); van Dessel (2007)
Literal, factual messages	Rational	van Dessel (2007); El Houssi et al. (2009)
Designers' philosophy	Emotional	Durgee et al. (2016)
Designers' feelings	Emotional	Durgee et al. (2016)
Designers' intentions	Emotional	Durgee et al. (2016)
Analogies (Especially for new products)	Emotional/Rational	El Houssi et al. (2009)
Visual design	Emotional/Rational	Cyr et al. (2010)
Visual appeal (visual elements, such as images and colour)	Emotional/Rational	Shaouf et al. (2016)
Colour treatments in website design	Emotional/Rational	Cyr et al. (2010)
Interactivity (such as games)	Emotional	Jones et al. (2008)
Vividness (Stimulating video, fade-ins etc)	Emotional	Jones et al. (2008)
Allowable social interactions (community)	Emotional	Jones et al. (2008)
Product photo	Rational	As derived by (Voss et al., 2003, p. 317) from Goldsmith et al. (2000)
Product price	Rational	As derived by (Voss et al., 2003, p. 317) from Goldsmith et al. (2000)

Note: These sources are a mix of arguments, suggestions on how to place them and/or to see them in use
Also note: For multiple elements how its perceived would depend on how its implemented in practice

2.4 B2C and B2B

This research will be done in a business to business (B2B) context as the focal organisation sells to businesses (and sport clubs). It would naturally enrich literature, as majority of the research has been done for the consumer market. Generally, causing the B2B literature to lag behind Lilien (2016). However, Baack et al. (2016) argues many B2C concepts might also be applicable to the B2B literature. However, this does remain the question as there are some fundamental differences between the two (Gilliland and Johnston, 1997) and Baack et al. (2016) remains rather vague. Gilliland and Johnston (1997) show B2B markets mainly differ in contextual conditions, psychological conditions, and marketing variable conditions. Within each set of conditional differences there are sub variables in which both markets differ.

The most relevant differences between B2C and B2B for this research are those regarding the contextual conditional differences. According to Brown et al. (2007) these are buying situation risk (B2C: low; B2B: high), product-market drivers (B2C: Fashion/ Self-expressive; B2B: Technological/ Utilitarian), and purchase decision process (B2C: individual;

B2B: group). Generally, the B2B buying risk is higher since most purchases are more important as their functioning or performance as a firm is on some level on the line. Causing industrial buyers to purchase more strategically and infrequent which results in more personal selling. Correspondingly, radical innovations aren't easily adopted B2B. Combining this with the involvement of multiple individuals in the buying process causes complexity to rise in B2B situations. Especially, when interests diverge within the buying firm between the buyer and user. For customers of the focal firm interests may diverge because the (potential) buyer is not likely to be the one who will use the product. Ultimately causing a confrontation for the buyer with increased perceived buyer risk, which the buyer might not be willing to take. It also seems to be true for the focal firm since the product might be considered as somewhat radical. Serving an excellent opportunity, and possibly even a requirement, for a website to decrease the worries of the potential customer and turn it into possibilities. This can be done by signalling cues to make the buyer more aware of the quality and performance of the product and/or brand. For which a website is an excellent medium, that might even be considered a must nowadays. In order to send the highest quality cues as possible, the general theme or appeal of the website (i.e.how to speak to the potential customer) seems of crucial importance. As one might tell the same thing in different kinds of styles. Using and optimising a website is not to say that it serves as a substitute for personal selling in the B2B market, but rather as a supplement. Especially, as the applicability of personal selling also seems to be true for the provision of information since Springer (2016) argues that each B2B buyer requires the right information at the appropriate phase such that it speaks to him or her and thus can be persuaded to buy. (Brown et al., 2007).

An important question is whether organisations really need hedonic products, and thus if an emotional appeal may be beneficial at all. This question is highlighted when looking at the general difference in product-market drivers between both markets. For a B2C market these drivers are more directed towards self-expression whilst in a B2B market utilitarian product use is of primary concern. The B2B market is more utilitarian since the main goal of an organisation is to deliver value to their customers. Value is generally easier and more effectively generated using utilitarian products or services. As a consequence the business market also demands a somewhat more technologically advanced product as the business buyer is most concerned with functionality (Brown et al., 2007). Additionally, an organisation is always in search of new ways to gain a competitive advantage. This should at least result in process improvements and/or increased value generation for the customer. Lynch and de Chernatony (2004) argue that organisational buyers can be influenced by both rational and emotional brand values. The latter of which may be used as a way for an organisation to develop a sustainable differential advantage and thus enhance the potential of value creation (Lynch and de Chernatony, 2004). It might also be applicable for usage in websites i.e. that applying an emotional appeal serves as a way to create additional value for the (potential) customer.

2.5 Determining the effectiveness of a B2B website

In order to determine the effectiveness of a website, it has to be recognised that its effectiveness is a multi-dimensional construct. One which is not easily depicted and depends on the goals which one wants to achieve. In the end, for a firm, this is increased revenue. One of the ways to determine this is by using the purchase probability scale. However, without using

a measure more dedicated to websites it is unlikely that the essence of website effectiveness can be portrayed. Especially, as website appeal is manipulated in this experimental research. When the appeal of a website changes, also one's attitude towards the website is likely to change. Whereas this, attitude towards the website, measure is a widely used one for the effectiveness of a website (McMillan et al., 2003). Therefore, it is expected that website appeal affects the attitude someone has towards the website (2.5.1). Generally, attitude towards the website is one's generic perception of how good (or bad) the website is. A good website may signal good product quality to (potential) customers (Baker et al., 1994). Whether or not an organisation is willing to invest in a product does not only rely on one's attitude towards the website alone. There are many other variables that play a role. Where, perceived usefulness of the product is expected to be one of the more important ones (Davis, 1989; Li et al., 2015). In contrary to attitude towards the website, perceived usefulness purports to measure what is directly related to the product. In addition it is not likely to be reliant upon someone's attitude but more their (logical) reasoning and how persuasive/convincing a message (or website) may be. As a website's persuasiveness may be affected by its appeal, it is expected that appeal has an effect on perceived usefulness (2.5.2). Both relationships are expected to be moderated by utilitarian and hedonic attitude towards the product (2.5.3). Considering the effects a website might have and its purpose, determining one's interest in the product seems crucial. Therefore, first it is expected that the attitude towards the website and perceived usefulness both influence purchase probability (2.5.4). One's purchase probability is only part of the interest one may have. Especially, as it might be that someone doesn't perceive the product to be useful for them but might be for others. This is measured using the Net Promoter Score (2.5.5). A summary of these variables, and its proposed effects can be found in figure 1.2, each of which is discussed in subsequent paragraphs.

2.5.1 Attitude towards the website

Attitude towards the website is of importance for this research as it conceives how one perceives the website, which is expected to change when altering the appeal of the website. Enabling a better understanding of the steps needed to provide users with a more usable and enjoyable website (Boostrom et al., 2013), as it is a widely used measure for the effectiveness of a website (McMillan et al., 2003). Attitude is often referred to as the long-lasting perceived evaluation of an individuals' likes, dislikes, action intention and emotional feelings regarding an idea or object (Kotler, 1991; Lin, 2011). Consequently, attitude towards a website is here defined as the (long lasting) continuous reactive orientation learned from a certain website (Lin, 2011). Where the orientation refers to the personal standards of an individual such as like and dislike. Generally, literature classifies attitude into two distinct components, which are cognition and affection. Cognition refers to thinking and affection refers to feelings (Vakratsas and Ambler, 1999). However, do note that in a B2B context there are often multiple individuals who together decide whether or not to buy a product. This could affect the practical effectiveness of the attitude towards the website variable. Effectiveness in predicting organisational attitude improvement as it is a complex matter due to various reasons. One of which is that every organisation is different, at least, in terms of hierarchy, purchasing formality, buying processes, and stakeholders. A question which subsequently rises is whether or not appeal has an effect on the attitude of an organisational buying entity towards the product. Moreover, researching this at all is a challenge. Especially, since it is not easily known who the website visitor is and whether the visitor has any influence within an organisation. The

proposed effects of website appeal on attitude towards the website depend upon the type of appeal used, which are described in the subsequent paragraphs:

Emotional appeal and attitude towards the website

It is expected that an emotional website appeal positively influences the attitude one has towards the website [H1a]. Positively because a prerequisite, implied by the definition of attitude, is that one would have to like the website and understand the message it is trying to convey in order for the attitude towards the website to go up. Conveying a message using the more abstract values that are derived from the consumption or possession of a product is expected to be easier to understand. Especially, as the focal product can be posited as somewhat radical. Therefore, understanding is possibly easier when using an emotional appeal than when using a rational appeal. This notion could also be interpreted from El Houssi et al. (2009), who discovered that using an analogy for new products is more effective than combining it with functional product related information[1].

Hypothesis 1a *Emotional website appeal positively influences the attitude one has towards the website*

To sum up, easy interpretation of a website is likely to be facilitated by using an emotional appeal. This consequently is likely to facilitate the liking of the website, causing attitude towards the website to be more positive. The same is likely to be of importance for the influence of a rational appeal on the attitude towards a website.

Rational appeal and attitude towards the website

It is expected that rational website appeal negatively influences the attitude one has towards the website [H1b]. Mainly because a rational appeal provides straightforward factual information to the individual which would make it difficult for the reader to comprehend. Especially, as the focal product is somewhat radical. Moreover, El Houssi et al. (2009) shows that adding factual information to an analogy is counter-productive[1] which might be a sign that emotional is preferred.

Hypothesis 1b *Rational website appeal negatively influences the attitude one has towards the website*

Thus, emotional and rational appeal are both expected to have opposite effects on attitude towards the website. Consequently, a mix of both appeals is likely to be mid-way between emotional and rational appeal toward generating an effect on attitude towards the website. This is, however, not posited as mixed appeal will be used as reference category for the regressions. Generating a positive attitude towards the website is expected to be different from generating a positive perceived usefulness as there may be different underlying processes at work.

[1]The research of El Houssi et al. (2009) used print advertising, which might cause a difference when comparing it to website visitors and the needs that they have

2.5.2 Perceived usefulness

A product may be perceived useful in varying degrees. Davis (1989) defines perceived usefulness as the belief of an individual that using a particular system or product would enhance the job performance to a certain degree. Using this definition enables to take job differences into account in perception of usefulness. Which is of particular importance in B2B, as it is likely that buyer and actual user are different. Causing that buyers should primarily be persuaded to buy whilst not being the ones that benefit. This in contrast to end-users who are more easily engaged using such products (which is also the case for focal product) and are therefore also more likely to adequately perceive its usefulness[2].

Generally, literature posits that perceived usefulness of a product is of crucial importance (Li et al., 2015). For example, Davis (1989) argues perceived usefulness is significantly linked to the usage and acceptance of an innovation. Even more so than ease of use. The prominence of the effect of usefulness on usage (and adoption) of an innovation makes sense because users (and in particular in B2B) are primarily driven by the function an innovation may perform for them. Moreover, Frambach and Schillewaert (2002) notes that perceived usefulness is especially important for organisations in the adoption process. Whereas Davis (1989) notes that perceived usefulness can be posited as a prerequisite for adopting an innovation. A vast amount of literature studies has since then been done on this subject. More specifically, on the technology acceptance model which tries to explain the acceptance or rejection of technology. A key role in the technology acceptance model has been laid out for perceived usefulness (Marangunić and Granić, 2015).

When marketing (B2B) products an information discrepancy may appear between seller and buyer. This discrepancy may be caused by inadequately transferring relevant product information to the potential buyer. Such a discrepancy could influence the time or period over which an innovation is adopted (Webster, 1969). A lack of clear knowledge transfer might, therefore, have an effect on the success of an innovation. Appropriate knowledge transfer is of particular importance for start-ups and small companies because the time over which an innovation is adopted could make or break the firm due to their decreased financial manoeuvrability. In such a case, the quality of a website is of primary concern. In particular because for many individuals a website is often a first touch point with the product and brand. First impressions are therefore often based on the impression an individual got from a website. In turn these impressions affect someone's propensity to revisit the website (Thielsch et al., 2014) and purchase intention (Everard and Galletta, 2005). In addition Cotlier (2001) argues that the first seven second are the most crucial because one could turn a prospective customer off within that time period. Therefore, such a first moment should spark interest through showing how it will be useful. So, insufficiently and inappropriately informing a potential customer is expected to result in a decreased perceived usefulness of the product in view of the customer. Thus, potentially limiting the adoption rate of the product (Li et al., 2015).

A website can assist in delivering product information. This can be done in various ways for which website appeal determines, in general, the theme and type of information displayed. Displaying the right kind of information might spark adoption through increased perceived usefulness, whilst providing the wrong could limit it. Adequately providing product related information is particularly important when a radical new product enters the market. Such

[2]Even though ignored it has to be recognised that although end-users are not the buyers, pressure on buyers might increase as more end-users perceive the product as useful

a new product requires new knowledge for the potential customers on, for example, how to use the product. This is due to the fact that a radical innovation will be new to the user in terms of experience requiring insight. Insight is expected to be most effectively delivered using a rational appeal because it links product attributes to benefits and provides the most in-depth knowledge. Causing it to become more tangible for the (potential) customer. For incremental innovation it might also be true that inappropriate use of website appeal inhibits information transfer since information, in some form, is always required to get someone interested. However, for incremental innovation it will be more dependent upon the situation, i.e. prior knowledge, potential product usage, and one's likes and dislikes. Appropriate use of website appeal is expected to be especially important within the B2B segment, since B2B buyers are (exceptionally) sensitive to personalised information (Springer, 2016). Moreover, for radical products potential customers are more likely to inadequately perceive the usefulness since there is more knowledge required to allow interest to rise and adequately understand its relevance. Making it interesting for this research since the focal product can be described as radical. The hypotheses including its main arguments regarding perceived usefulness are subsequently described, starting with emotional appeal:

Emotional appeal and perceived usefulness

It is hypothesised that an emotional website appeal negatively influences one's perceived usefulness of the product [H2a]. Firstly, because in order for someone to perceive that a product is useful, information is required. At least enough to gain insight on where it can be used for and what value it adds. This is more likely to occur when using a rational appeal than when an emotional appeal is used. As an emotional appeal emphases the more abstract values that are derived from the consumption or possession of a product (Hernandez et al., 2014) and rational appeal tries to link product attributes to benefits. Secondly, organisational buyers are most concerned with functionality (Brown et al., 2007), which is more likely to be converge with the characteristics of rational appeal than emotional appeal.

Hypothesis 2a *Emotional website appeal negatively influences one's perceived usefulness of the product*

The same processes are likely to be affecting rational appeal too with respect to its ability of generating perceived usefulness. The following paragraph will describe this.

Rational appeal and perceived usefulness

Allowing someone to see a product as useful requires knowledge caused by the right information. This could be information related to the benefits of the product (rational appeal), or using the more abstract values that are derived from the consumption or possession of a product (emotional appeal). B2B products are most likely to benefit from transferring accurate and relevant product information. Especially, when using the definition of perceived usefulness from Davis (1989). Who defines it as the belief of an individual that using a particular system or product would enhance the job performance to a certain degree. In order to know whether a system or product enhances job performance requires specific knowledge which is more likely to be displayed using a rational appeal. Therefore a rational appeal is most likely to influence perceived usefulness positively [H2b].

Hypothesis 2b *Rational website appeal positively influences one's perceived usefulness of the product*

As previously mentioned (2.3), there is some disagreement whether or not there has to be a match between appeal and product type. As a consequence, it may be that the effects of both hypotheses are reversed. However, as there is disagreement the effect of product type is expected negligible compared to the fit of market characteristics. Additionally, perceived usefulness isn't posited to influence attitude. It isn't proposed since it isn't of this research main interest to analyse these effects. Whereas, both are expected to behave differently when subjected to a different website appeal due to the different possible underlying processes. In conclusion an easy to read website is expected to be most beneficial for generating a positive attitude towards the website, a factual attribute-benefit driven website is expected to be most beneficial for generating a positive perceived usefulness. Whereas, both processes are expected to be affected by one's attitude towards the product.

2.5.3 Hedonic and utilitarian components of product attitude

One might use a product for utilitarian and hedonic purposes (Bridges and Florsheim, 2008; Jones et al., 2006; Overby and Lee, 2006). Moreover, a product can be high or low in both hedonic and utilitarian dimensions (Crowley et al., 1992), both of which can be considered part of product attitude. Voss et al. (2003) shows that by using these two attitudinally distinct measures product attitude can be accurately measured and tested. Tested, for example, to see in what level consumer choices are driven by hedonic or utilitarian use considerations (Dhar and Wertenbroch, 2000). Literature poses use considerations drive consumer choices (Dhar and Wertenbroch, 2000). Products primarily characterised as hedonic offer the user more experiential consumption, fun, pleasure, and excitement, whilst utilitarian ones are characterised as primarily instrumental and functional (Dhar and Wertenbroch, 2000; Khan et al., 2005). Furthermore, researchers generally argue utilitarian experiences are more rational in nature, whilst an emotional response is more the result of hedonic experiences (Kronrod and Danziger, 2013; Alba and Williams, 2013). Voss et al. (2003), shows both constructs are important and separate attitudinal dimensions one has towards a product. Additionally, Voss et al. (2003) states that in multiple disciplines the hedonic and utilitarian components of attitude have been of interest. Disciplines such as sociology, psychology, marketing, and economics (Voss et al., 2003). Which shows there is a broad recognition of the importance of the variable.

As discussed earlier, research generally agrees that matching an utilitarian product with a rational appeal and hedonic product with an emotional appeal is in general best. So the more one would (consider to) use a product utilitarian compared to hedonically, the more a rational appeal is likely to be favourable. Consequently, the higher the hedonic use is compared to the utilitarian the more an emotional appeal is expected to be favourable. Therefore, it is expected that product attitude, comprising of hedonic and utilitarian attitude towards the product, has an effect on the relationship between website appeal and both attitude towards the website (2.5.3) and perceived usefulness (2.5.3).

Moderator effect of product attitude on the relationship between website appeal and attitude towards the website

The relationship between website appeal and one's attitude towards the website is expected to be moderated by the two components of product attitude, hedonic and utilitarian attitude. For this, a hedonic product attitude is expected to positively moderate the relationship between emotional website appeal and attitude towards the website. Positively because a hedonic product attitude is expected to fit an emotional appeal. Thus the higher one's hedonic product attitude, whilst using an emotional website appeal, the higher the attitude towards the website is expected to be [H3a].

Hypothesis 3a *Hedonic product attitude positively moderates the relationship between emotional website appeal and attitude towards the website*

Consequently, using an emotional appeal in case someone has an utilitarian attitude towards the product would decrease attitude towards the website. Therefore, it is expected to moderate the relationship negatively [H3b]. The main reason for this would be that there is a misfit between how one would consider to use the product and how it is presented. Especially as, Klein and Melnyk (2014) argue consumption goals matter for what type of argument is most effective. Even though there is some disagreement as multiple authors argue that a moderate mismatch improves effectiveness for utilitarian products (Lim and Ang, 2008; Klein and Melnyk, 2014). However, this disagreement is not expected to outweigh the other processes.

Hypothesis 3b *Utilitarian product attitude negatively moderates the relationship between emotional website appeal and attitude towards the website*

For a rational website appeal similar processes are expected to be at work. The main difference being the consecutive effects on attitude towards the website. First, it is expected that hedonic product attitude positively moderates the relationship between rational website appeal and attitude towards the website [H4a]. Positively because it would reinforce the negative effect a rational appeal would have on attitude towards the website. This effect would be reinforced as a rational appeal and a hedonic product would be a mismatch (Johar and Sirgy, 1991; Lin et al., 2014; Zanon and Teichmann, 2016).

Hypothesis 4a *Hedonic product attitude positively moderates the relationship between rational website appeal and attitude towards the website*

Second, it is expected that a utilitarian product attitude negatively moderates the relationship between rational website appeal and attitude towards the website [H4b]. Negatively because it would inverse the negative effect a rational appeal would have on attitude towards the website. This would be the result of the fit between a rational appeal and utilitarian product (Johar and Sirgy, 1991; Lin et al., 2014; Zanon and Teichmann, 2016).

Hypothesis 4b *Utilitarian product attitude negatively moderates the relationship between rational website appeal and attitude towards the website*

In summary, the effects a particular product attitude has on the relationship between website appeal and attitude towards the website is mainly based on how both fit together. The same is expected to happen for the relationship from website appeal to perceived usefulness, as subsequently discussed.

Moderator effect of product attitude on the relationship between website appeal and perceived usefulness

Klein and Melnyk (2014) argue consumption goals matter for the effectiveness of arguments. These consumption goals can be stated by using the concept of product attitude. Product attitude is posited by Voss et al. (2003) to consist of hedonic and utilitarian attitudes toward the product. As generally literature agrees that hedonic products should be fit with an emotional appeal (Johar and Sirgy, 1991; Lin et al., 2014; Zanon and Teichmann, 2016), it is posited that: Hedonic product attitude positively moderates the relationship between emotional website appeal and perceived usefulness of the product [H5a].

Hypothesis 5a *Hedonic product attitude positively moderates the relationship between emotional website appeal and perceived usefulness of the product*

Correspondingly, it is expected that an utilitarian product attitude negatively moderates the relationship between emotional website appeal and perceived usefulness of the product [H5b]. As it would be inappropriate to use an emotional appeal for a product perceived as utilitarian. Even though there is some disagreement as multiple authors argue that a moderate mismatch improves effectiveness for utilitarian products (Lim and Ang, 2008; Klein and Melnyk, 2014). Possibly making a mixed appeal more effective.

Hypothesis 5b *Utilitarian product attitude negatively moderates the relationship between emotional website appeal and perceived usefulness of the product*

The same general principle is expected to be applicable in case a rational appeal is used. Meaning that a hedonic product attitude is expected to negatively moderate the relationship between rational website appeal and perceived usefulness of the product [H6a]. It is expected to be negative because there is a mismatch between what information is needed and what is presented. Manifesting through the mismatch of (assumed) consumption goal (as displayed through product attitude) and website appeal.

Hypothesis 6a *Hedonic product attitude negatively moderates the relationship between rational website appeal and perceived usefulness of the product*

Correspondingly, an utilitarian product attitude would fit an rational website appeal. Therefore, it is expected that an utilitarian product attitude positively moderates the relationship between rational website appeal and perceived usefulness of the product [H6b].

Hypothesis 6b *Utilitarian product attitude positively moderates the relationship between rational website appeal and perceived usefulness of the product*

Thus, the frameworks of Johar and Sirgy (1991); Lin et al. (2014); Zanon and Teichmann (2016) seem of primary importance in determining how the utilitarian and hedonic components of product attitude affect perceived usefulness. In particular because these articles showed this fit would most likely be best. Although not all researchers agree (Lim and Ang, 2008; Klein and Melnyk, 2014).

2.5.4 Purchase Probability

Purchase probability is for this research of particular importance as it is conceives one's interest in the product, which is a key determinant of (buying) behaviour (Ajzen, 2015). Purchase probability is similar to purchase intention as can be seen when comparing definitions. Purchase intention can be defined as the degree to which someone makes a concious plan of making an effort to purchase a product (Spears and Singh, 2004). Instead purchase probability is noted as the probability to which one indicates to buy a product or service. Given these definitions, both are considered similar. The purchase probability scale is used as it has been shown by literature to outperform the intention measure (Brennan, 2004). Research shows online purchase intention, a derivative of purchase intention, is an important predictor of actual buying behaviour (Chen et al., 2010). For an organisation, actual buying behaviour is what determines its success in the end. It has, however, to be noted that actual buying behaviour is best predicted for existing durable products in a short time horizon (Morwitz et al., 2007). Causing it for the new product, used in this research, to be a less likely to predict actual sales. Additionally, Baack et al. (2016) showed that organisational buyers are not always objective. Causing that positioning of a product could have a direct effect on the likeability of the product and its price and thus whether its bought or not. Therefore, in subsequent paragraphs the hypotheses related to purchase probability are discussed.

The effect of attitude towards the website on purchase probability

It is expected that the more positive one's attitude towards the website is, the more likely it is that an organisation would consider to buy the product [H7]. More likely since, Fishbein and Ajzen (1975) have shown that attitude is able to influence behavioural intention such as purchase intention. Bruner and Kumar (2000) even show one's attitude toward a website influences one's purchase intention — especially, in low risk buying situations (Brown et al., 2011). Moreover, organisational buyers are susceptible to subjective marketing information since literature starts to realise organisational buyers are not always objective decision makers (Baack et al., 2016) — which tends to be less true the higher the buying risk (Brown et al., 2011). The risk for buying the focal product is not that immensely high which makes this variable, especially, worthwhile to research given the context.

Hypothesis 7 *One's attitude towards the website positively influences one's purchase probability*

This relationship is of particular interest in this study for two reasons. First, its the first time for the subjects to make contact with the product. Causing a less biased first reaction — where it may be expected that when one already knows a product or brand, it would matter less. Second, Cotlier (2001) argues that one could turn off a prospective customer within seven seconds after visiting the website — whilst the main interest here is customer acquisition through the creation of interest in the product. In conclusion; When attitude towards the website is higher, it is expected that someone is more likely to have a higher purchase probability. Thereby ignoring the buying phases an organisation may require before adopting the innovation.

The effect of perceived usefulness of the product on purchase probability

Within the (potential) buying firm a difference may appear between buying and non-buying entities. Especially, when separate parties have competing interests and the power distribution is inappropriately dispersed (Simon, 1991). Possibly resulting in different buying priorities. For example, for the Dutch football and hockey market of the focal firm this may be true since the trainers (and players) benefit from the product whilst its management does not. At least, not in a direct fashion. Only when the appropriate information is supplied to the managers, will they possibly gain interest in the product. Causing for these markets an increase in complexity. Therefore, it is of crucial importance to provide the right information to the right entity. On a website this can be achieved by using an appeal suitable for both parties. Only when key stakeholders within an organisation are convinced it may be useful for the organisation will they start to consider buying the product. Hereby neglecting the fact that a competitor might have a more suitable product with a higher cost to benefit ratio. Making perceived usefulness a possible prerequisite for purchase probability. For this reason it is expected that perceived usefulness positively influences purchase probability [H8]. The sports market should make it easy to detect whether a positive influence exists as these markets favour innovativeness and newness (Winand et al., 2016; Hoeber et al., 2015).

Hypothesis 8 *Perceived usefulness positively influences one's purchase probability*

However, some irregularities may be measured because Okada (2005) shows that the type of product (hedonic/utilitarian) has an influence on the currency by which someone is willing to pay. More specifically, people are inclined to pay more in money for utilitarian products whilst they are willing to pay more in time for hedonic product. This might have an effect on the proposed effects directed towards purchase probability. To minimize these irregularities, no prices will be shown to the respondents.

2.5.5 Net Promoter Score

When seeing a new product it may be that the individual does think it is interesting and useful but not for them. This may be due to various reasons, such as the incongruence between product consumption goal and personal and/or organisational goal. For example a product may relieve pain for those with back problems but the person in question may not have any back problems. When said individual remembers the product and its use when crossing into someone who could benefit from it, the individual might suggest it to the other. The likelihood of someone promoting the product can be measured by using the Net Promoter Score (NPS) — which is based on a single "would recommend" question. It is an indirect way of measuring the effectiveness of the, in this case, website in creating someone's interest in the product. Moreover, Reichheld (2003) argues that Net Promoter Score is a value that should be of primary concern for each organisation. However, not all researchers agree that the net promoter score is of added value (Morgan and Rego, 2006). One of these is the concern that the measure is not related to actual promoting behaviour. In order to shed some light on these concerns Raassens and Haans (2017) researched if this "would recommend" question predicts actual electronic word of mouth[3]. Raassens and Haans show it does. Moreover, the height of the score is likely to predict the type of electronic word of

[3]Raassens and Haans (2017) have used the publicly available messages on social media. Therefore, electronic word of mouth does not include notes made about a product or service in e-mails that were send

mouth the company receives. Meaning that if one scores high/low on the net promoter score, he or she is likely spread positive/negative electronic word of mouth. Where, in addition, the interesting discovery has been made that besides engaging in immediate electronic word of mouth, the company will receive this attention for a longer period of time. The framework provided by Raassens and Haans (2017) may subsequently be of interest for this research. Most specifically, because it might be the case that a higher electronic word of mouth indicates that the individual is more likely to send a direct or indirect message to a more influential person in the organisation. Causing a higher chance that the organisation would purchase the product. On another note, no related B2B research has been found that researches the net promoter score for organisational purchases. Causing the following important question to remain, which is whether or not a higher net promoter score actually will result in more purchases. However, the NPS does show the effectiveness of the website to generate some interest in the product. Consequently, it is expected that attitude towards the website (2.5.5) and perceived usefulness (2.5.5) both influence NPS.

The effect of attitude towards the website on Net Promoter Score

It is expected that the more positive someone's attitude is toward a website, the more likely it is that the individual will promote the product being appraised on that website [H9]. Therefore, the hypothesis is as follows:

Hypothesis 9 *Attitude towards the website positively influences the net promoter score*

Furthermore, it isn't expected that the relationship between attitude and NPS is moderated by product attitude. Not moderated because of the expectation that a more positive attitude can have a direct effect on NPS irrespective of the customer type.

The effect of perceived usefulness of the product on Net Promoter Score

Perceived usefulness of the product is expected to have an effect on the NPS [H10]. More specifically, a positive effect because the perceived usefulness can be posited as a prerequisite for buying (Davis, 1989).

Hypothesis 10 *Perceived usefulness positively influences the net promoter score*

However, it might be that in practice the buying firm would be reluctant to tell. This because the focal product can possibly ensure a competitive advantage when using the focal product (Frambach, 1993). The difficulty then would only be to attract new customers since the only way they could know is through some sort of message. However, it is unlikely that the NPS takes this into account.

Chapter 3

Methodology

In order for the research to be done effectively and efficiently it has been designed carefully (3.1). Of primary concern are the respondents. These are the individuals who will be questioned. Especially, since targeting the wrong one's might limit the applicability of the results (3.2). The data required for this research has been collected using an online survey. For this survey, measurements and scales are designated (3.3). This data has subsequently been analysed using multiple statistical tools. For this multiple considerations have to be taken into account (3.4).

3.1 Manipulation

In figure 1.2 the proposed research interaction effects are depicted. These effects will be researched using an experimental design for which a different website page is made for each customer type (football, hockey, fitness, physiotherapy, and physical education) and appeal (emotional, mixed, and rational). As a consequence fifteen (5x3) different websites have been designed (3.1.1). For these pages English has been chosen to use since it is expected all customers will understand it since it is simple English and meant for reading only[1]. After the first complete version of the website was finished, a pretest was done. This was to test how the pages were perceived, and if alterations were necessary. More specifically, to test whether the pages are really perceived as emotional, rational or a mix of it (3.1.2). As a guidance for the research design Cooper and Schindler (2014) has been used. The links to the websites that were used in this research can be found in appendix B.

3.1.1 The websites

For this research fifteen different websites have been created. Each of with as focal point SmartGoals. In order to design the websites, an extensive literature research has been done to find elements that are considered emotional and rational. However, literature discussing such elements is quite scare. Let alone finding proof of how its perceived. Table 2.1 depicts those that have been found. Therefore, much of designing came to gut feelings, and searching the internet for creative yet easy implementable elements. This process proved difficult,

[1]Here the explicit word choice has been made for simple English meant for reading only. As later turned out that the survey had to be translated because the English was too difficult. Especially, as it required a step more than reading only, interpretation. However, such troubles weren't caused by the fact that the website was English

especially as most creative designing skills had still to be learned. Causing a limiting effect on how extreme the appeals could be designed. The next three sections discuss how this design turned out for the distinct appeals. Each of these websites were restricted to one page only, on which various elements were placed. The short descriptives of the actual elements used can be found in table 3.1. However, before discussing the designs of the different appeals the general process is depicted which a subject has to go through in order to become a respondent. Furthermore, since these websites will be used on actual potential customers, several requirements of the company had to be met. Additionally, the websites used had to be controlled such that results can be compared. On a side note, these sections discuss how the websites actually turned out to be. Not how each was before the website pretest which tested whether the websites were perceived as expected.

General process

First contact with the subjects has been made using email. When a subject has opened the mail, one is (amongst others) presented with a button. After clicking on it he or she is directed to one of the websites. The general decision has been made that after five seconds a subject lands on the website, it is made clear where to click in order to continue to the survey. For this purpose a button is shown in the upper right corner. This has been done (instead of only putting it at the end of the website) because pretests indicated it was too hard to find how to continue to the survey or it might be forgotten. However, this might as a possible side-effect draw the subjects to the survey too soon. Hopefully after the subject viewed the website, the respondent clicks to continue to the survey which has been made using Google Forms. When the survey has been opened first a short description, with a personal picture is shown to remind them. After this page the subject is guided through the questions, and are submitted when finally the subject clicks on submit.

Emotional appeal

As previously defined (2.3) an emotional appeal emphasises the more abstract values that are derived from the consumption or possession of a product (Hernandez et al., 2014). In order for the websites using emotional appeal, to reach that goal all elements where designed to try and make someone feel it. Rosen and Purinton (2004) argue symbolic messages can used to convey an emotional message. For example, using metaphors, storytelling and aesthetics. Additionally, Lee and Gretzel (2012) argue pictures and other types of visualisations are of crucial importance for websites and can also have influence on product attitudes. Therefore, these pages are set-up using highly symbolic messages, pictures, and videos. In case of these emotional websites, preferably pictures and videos were used with someone expressing a specific positive emotion. In order to distinguish the emotional videos from the rational, it has in certain circumstances been chosen to decrease the length and focus more on the personal. In certain circumstances because resources were limited establishing a clear difference proved difficult. Additionally, for the websites designated as emotional (and mixed) a game allowing the user to interactively get an impression of the product has been added[2]. Also fade-ins were used which are effects that subtly make an element appear out of nowhere. To emphasise the emotional, the elements are designed as such to create a narrative. For example, photos from the founders have been added with a written intention why they wanted to bring the product

[2]It has to be noted that this game could only be used for those using a computer.

to the market. An overview of all elements used on the websites designated as emotional can be found in table 3.1.

Rational appeal

A rational appeal should, as previously discussed 2.3, primarily emphasise the advantages of product attributes and be more factual. This has mainly been done by stating product related characteristics, features, and benefits concise and accurate. Mostly (and preferably) joined by a product related picture or visualisation without seeing them be used. A simple example for this is the location of SmartGoals. For rational appeal this has been done by simply stating the address in combination with a map. Contrary to rational appeal, the emotional pages do this by describing the location in terms of its history. Visualised using a beautiful artistic picture. In addition, video's are shown and used to depict possible exercises one could do with the product. The video's that are shown on these pages are longer, and contain (preferably) only shots without trying to convey a feeling. This isolation was, however, not always possible. One of the main features of the used rational appeals is the use of analogies. Several analogies have been used each of which refers to one of the functions that the focal product portrays. For example, one analogy is related to the products' ability to track one's performance. Correspondingly, performance tracker is used as analogy. All these analogies are depicted under the heading *"What is SmartGoals?"*. Whereas, the analogies have been drawn because El Houssi et al. (2009) argue that analogies may be key in explaining new products to customers. However, to allow rational interpretation the analogies are stated in concise and factual fashion. An overview of all elements used chronologically on the websites designated as rational can be found in table 3.1.

Table 3.1: Elements used for emotional and rational website in chronological order

Emotional	Rational
Video introducing the product and it's use in an emotional fashion	Functional video of the product in use
Tying emotional benefits to properties of the system	Analogy using product features + Video on how to set up the product
Game to interactively simulate product use	Logical benefits of what value the system adds
Video showing how beautifully the system can be used	Logical benefits of the system for the different entities
Emotional depiction of added bonus feature with photo of role model	Video of logical benefits for using the system
Emotional use properties with a photo showing simplicity	Functional depiction of added bonus feature with product photo
Tekst and photo to show the product is there to realise your dreams	Functional properties for use with a slide show of product photo's
Tekst and photo to show it can be used anywhere any time	Functional information about an extra feature with video
Video of a professional application of the product with nice visual images	Statement about possible support with product photo
Photos of the founders and their intentions with the product	Component listing with photos
News affecting the company and its executives	Factual statements that professionals use it with adoption graph
Photo of one of the founders with emotional statement about support	Package information (without pricing)
Descriptive information about the location with a beautiful photo	Location of company using Google Maps

Note: Mixed appeal has been left out as its a combination of emotional and rational appeal and it would result in an unreadable table. Therefore, no new element types have been introduced.

Mixed appeal

Mixing both appeals can be done in various ways. The choice has, however, been made to use existing element from both appeals and blend them together. Causing certain elements to be copies from one of the appeals. However, mostly not straight copies because the website still has to portray a mix of both. Take for example, the third rational element (Logical benefits of what value the system adds). For this element the logical argumentation have been removed. Whereas, the mixed appeal websites have in general been restraint to use the

most distinguished elements from emotional and rational appeal. Take for example the fourth rational element (Logical benefits of the system for the different entities), this one can only be found in rational appeal. Whereas the tenth element (Photos of the founders and their intentions with the product) has only been used for emotional appeal. The latter of which has not only been added to make someone feel more connected to the people behind the product, but also to see the bigger picture.

Company related website requirements and limitations

The designs of the websites were confined by certain restrictions. One of which is that the company style had to be used. Meaning that not any random colour scheme or font could be used. Also a certain minimum amount of information had to be transferred. As a result, the abstractness in portraying the emotional appeal was confined to certain limits. Furthermore, no monetary units could be showed. Additionally, during the research period only a limited amount of materials were available[3]. Which is one of the limitations that the focal firm is a start-up.

Controlling variables

Literature has widely researched the influence of the various aspects that could influence how a website is perceived by consumers. For organisations this has only been done scarcely. Making it difficult to comprehend what the result would be of adding various elements. In order to minimize confounding/interfering effects clouding the usefulness of this research, criteria have been set-up. All with the purpose to keep the website usability constant, which is an important variable for e-business success (Lee and Kozar, 2012). Lee and Kozar (2012) identifies multiple dimensions that adhere to website usability. These criteria set-out are specifically to adhere to these dimensions. This is of particular importance since different websites are made, all of which have to be comparable. Therefore, all websites remained as much the same as possible regarding these criteria, such that the usability remained as constant as possible. Of course, some deviation was necessary. The criteria are:

- In general, the same type of elements are included. The appeal of which can and will be different. For example, mentioning the benefits of the system for the user can be done by rationally or emotionally. For the focal product the difference could be shown by the following two sentences: ”brings the gaming experience to the field” (rational) or ”gives you more fun” (emotional). However, it has to be realised that certain (minor) changes are required.
- The navigation components of the website have to be identical. For the most part these have been removed.
- The websites have the same type of complexity, as this is argued to affect the interest one may have (Rosen and Purinton, 2004). A simpler, more minimalistic approach to the design is favoured. Causing all websites to use a one page design.
- Loading time of the pages will have to remain the same as this might affect one’s interest (Rosen and Purinton, 2004). This has been adhered to by keeping the size of the websites as constant as possible, and only using one internet domain.
- The usage of visual elements has to remain constant (Shaouf et al., 2016; Scott and Scott, 1994). However, the appeal of these image may be different.

[3]It has to be noted that there was an actual difference in the available materials between the different markets

– The call to continue to the survey is done in the same way.
– No pricing information is provided as this may disturb signals of the proposed effects.
– Readability remains constant. This is done by, for example, keeping the font sizes constant and using as much the same content for the different markets.

3.1.2 Pretest of interpretation of the website

In order to ensure the appeals are actually different enough a pretest is done. For this a random sample is used outside of the subjects involved for this research. This is done to minimize the risk of depleting the supply of respondents in the main sample (Cooper and Schindler, 2014). It involved asking the questions proposed by Voss et al. (2003) to determine level of the utilitarian and hedonic components for each appeal. First, this measure has been used because no direct measure was found to determine how emotional and rational someone thought a website is. And, second, since a parallel could be drawn from the measure of Voss et al. to the emotional and rational components of appeal this measure has been used. The results of the pretest are depicted in appendix E. The main conclusion that can be drawn from this is that both websites aren't distinguished enough. Therefore, the differences have been amplified. Whereas, due to time and resource limitations no other pretests for the website have been done. However, the importance of the appeal interpretation is realised i.e. that an emotional appeal is really emotional and a rational appeal is really rational. Therefore, an additional survey has been done using a minority of the main sample. This is discussed in 5.2.1.

3.2 Sampling

Sampling decisions are one of the more important decisions for research. Most importantly because the subjects have to be adequately chosen as it partially determines the generalisability of a research (3.2.1). In order to gain the support of these subjects, an appropriate emailing strategy is key (3.2.2). In this section decisions regarding both aspects are discussed.

3.2.1 Subjects

The subjects for this research are potential customers of SmartGoals in The Netherlands. Those who never seen the product in real life. Preferably with some buying power. The sampling of these subjects has been done by systematically searching on the internet for e-mail addresses. This first involved to find applicable clubs and organisations. These clubs and organisations itself had to fit a profile in order for it to be of interest in this research. For clubs this involved that football or hockey had to be taught or practised. Physiotherapy practices had to involve some sort of recovery process where the individual has to move because only then the focal product would be of interest. Furthermore, fitness organisations had to be about more than only weightlifting and cardio. Also budget organisations, such as Fit for Free, have been excluded as these are not likely to adopt the product at all. Also football schools were included in the sampling process, for which every organisation was applicable.

Subsequently, a list of jobs or functions has been established to note those that could have some buying power or autonomy in the buying process (Table 3.2)[4]. Subsequently, when

[4]It has to be noted that this is the list it eventually became to be. As in earlier stages only board members and directors were sampled but that only delivered a few e-mail addresses. Even more so in some markets

searching the internet for email addresses websites were scanned. Each of these websites were scanned to check if any email address was given for one of the functions. However, in many cases their only was a generic email address which in such a case therefore has been used. This was especially true for the fitness market, which almost entirely consists of generic email addresses. The gathering process was done by compiling a list in excel with name of the club or organisation, email address, and if possible the first name of the individual. In addition to this gathering process the football club email addresses have been combined with email addresses gathered by the main football distributor and a paid list. This has been done to increase the range of the mailing and speed up the process. These lists mainly only contained board members. After completing the search e-mail addresses, links to the websites have been randomly assigned. After all individuals completed the survey, those who have seen or used the product in practice are filtered out using a question which was asked in the survey.

Table 3.2: Individuals in the mailing list based on job description

Football & Hockey clubs	Physiotherapy	Fitness	Physical education	Football schools
Chairman	Director(s)	Directors	Directors	Directors
Treasurer	Boardmembers	Personal trainers	Department managers	Boardmembers
Other boardmembers	Physiotherapists	Administration	Head of teachers	Manager of the trainers
Manager of the trainers			Teachers physical education	Material manager
Material manager				

3.2.2 Mailing

This research has been set-up using an experimental design for which different websites have been made. The process is as such that the subjects are first contacted using e-mail send by using mailing automation systems such as Mailchimp and Sendgrid. A summary of the mails that were send can be found in appendix D. Of primary concern here is an appropriate subject heading, such that subjects open the email. To maximise the open rate A/B tests have been done. In addition, this also has been used for the email content. The content in these e-mails is written in Dutch with the primary goal being to convince subjects to visit the website and fill in the survey. A part of the convincing is done by using incentives. This incentive is the possibility of winning a clinic worth about three-hundred-fifty Euro. This has been done as Sauermann and Roach (2013) argues these incentives increase the odds of responding by thirty percent, whilst it doesn't come at the expense of lower data quality. Additionally, a personal picture is included since Deutskens (2004) argues that including visual image improves response quality. Also, the mails which are sent contain (if possible) personalisation. This has been done as Sauermann and Roach (2013) shows it might dramatically increase the response rate. Finally, the purpose and what is expected of the subject is clearly shown. This is done as Fan and Yan (2010) argue that it is mainly important to make respondents easily get the notice of the survey and make it easy to open and use. One of the ways this has been done is by putting a reasonably sized button in the e-mail, which when clicked on, sends the subject to the website. Moreover, the subjects weren't informed on the purpose of the research in order to reduce bias. Giving this research uses a blind approach.

than others.

3.3 Measurements

In order to measure the constructs adequately, literature has been consulted. For which attitude towards the website has been measured using the measure of Bruner and Kumar (2000) (3.3.1). Additionally, the measure of Davis (1989) is used to gain insight in perceived usefulness (3.3.2). For purchase probability the Juster purchase probability scale (Juster, 1966) is used (3.3.3), whilst for the net promoter score Reichheld (2003) is used (3.3.5). Furthermore, the ten question measure of Voss et al. (2003) is used to gain insight on the hedonic and utilitarian components of product attitude (3.3.4). Finally, two bogus questions are added to help identify careless and invalid responders (3.3.6). All these measures are combined in a list of survey questions that is included in appendix C. Unfortunately, all questions had to be translated because a first mailing, going to almost two-thousand subjects, only realised a few responses[5]. Where also an e-mail and a couple of notes were received that the language was inappropriate. Therefore, with the help of Dr. S.E.C. Gelper and C.J.J. Heger MSc. the questions were translated to Dutch. On a side note, in the questions asked, no time and contextual information will be provided. This seems especially important for purchase probability (Parackal and Garland, 2006). An online version can be found here. In addition to these survey related measures, Google Analytics has been used to measure data on how the website has been used during this research (3.3.7). Whereas, the general information provided by the respondent has been used to identify one's job and influence within an organisation (3.3.8).

3.3.1 Attitude towards the website

Boostrom et al. (2013) argue there, generally, are four different possibilities to measuring one's attitude toward a website. The measure of Kang and Kim (2006) is one example of a group consisting of one question. This type of measure is quickly rejected as it has some major disadvantages (Churchill and A., 1979; Boostrom et al., 2013). A second type of measure uses semantic differential scale, that measures the perception of concepts, opinions and attitudes (i.e. bad idea/good idea, sweet/bitter). An example of this is the scale proposed by Karson and Fisher (2005) and has been adopted widely. However, Kempf (1999) has argued such a scale might run into problems causing this type of measure to be discarded for use. Chen and Wells (1999) designed the first scale specifically for measuring attitude toward a website. This measure comprises of six questions using a Likert scale. This measure can be categorised as multi-attributional and has specifically been made to understand and measure website effectiveness. It comprises of the three factors that Wood et al. (2008) argued are of primary importance to websites. Finally, two issues later than the measure from Chen and Wells (1999) the measure developed by Bruner and Kumar (2000) appeared. This measure asks three different questions to the respondent. They use a five point Likert scale for this ranging from Agree to Disagree. Boostrom et al. (2013) argues the scale of Bruner and Kumar (2000) hasn't been adopted widely by research as its development wasn't the main part of the study. Moreover, in their research Bruner and Kumar (2000) shows their measure is the best one to use. Also, other research has criticized the measure of Chen and Wells (1999). To end the discussion, Boostrom et al. (2013) has analysed which of these two measures is best to use. They show the measure of Bruner and Kumar (2000) is the best one to use. Therefore, this

[5]It has to be noted that a survey pretest has been done, but didn't indicate the used language was problematic. Possibly because it was sampled outside of the focal sample.

research will use the measure of Bruner and Kumar (2000).

3.3.2 Perceived usefulness

Measuring perceived usefulness will be done using the scale of Davis (1989). This measure is chosen as literature has shown its valid and reliable (Adams et al., 1992; Hendrickson et al., 1993; Segars and Grover, 1993; Subramanian, 1994). Also, no other perceived usefulness measures have been found. The measure comprises of six questions each with seven answer possibilities. These range from extremely likely to extremely unlikely. Using the scale of Davis (1989) requires a specific set of questions related to the product itself. Therefore, alterations were required to make it more applicable to the markets used. Causing some minor changes within the questions asked per market. The beauty of these questions lies in the fact that it asks respondents to think about using the product and relating that to actual job aspects. For example, by asking if using the product would improve job performance and additionally stating what the imposed job performance would be. For the football market this question would be:

"Using SmartGoals would improve my job performance in helping clients/players train or do an exercise"

Therefore, regardless of what someone's job is, it is likely to relate to the same job aspect. And when its not part of someone's job description it is expected that the individual is able to relate because the questions are personalised to each market. Whereas the researched (buying) subjects are not expected to be so distant from the main activities of the organisation (or club) that they are unable to relate at all.

3.3.3 Purchase probability

Measuring purchase probability can be done using various measures. For this research the choice has been made to use the Juster Purchase Probability Scale (Juster, 1966) which measures the likelihood of someone purchasing a product (Day et al., 1991). This measure has been shown to be effective in predicting future purchasing behaviour (McDonald and Alpert, 2001). Research has shown this scale constantly outperforms other types of scales (such as purchase intention) and can be applied to a wide range of applications (Brennan, 2004). Unfortunately, not much research has been done to support these applications. Time is excluded in the questions as several studies already found approximately thirty percent of respondents is insensitive to such information (Kalwani and Silk, 1982). It could, therefore, offset the response usefulness as questions for the other seventy percent are sensitive to such information. Additionally, Kalwani and Silk (1982) argues respondents with a limited exposure to the concept are also exceptionally prone to response style bias. This bias causes very similar responses to entire sets of answers which may be triggered by insufficient knowledge on the product. It is likely this will be the case for respondents of this product as it can be considered radical and the respondents aren't expected to know the product. Therefore, it has been tried to design the survey environment in such a way as to allow respondents to easily switch between the questionnaire and website (done by opening the survey in a separate tab). The Juster Purchase Probability Scale asks a question that can be measured using a binary, five-point, or eleven-point scale (Morwitz et al., 2007). For this research the eleven-point scale will be used i.e. it comprises of eleven possible answers. The lowest value

is zero and highest ten. Each of which has a verbal (e.g., "almost sure"), numerical (e.g., "9") , and probability (e.g., "9 in 10") description (Brennan, 2004; Parackal and Garland, 2006). Gupta and Zeithaml (2006) state that there is a threshold on the scale above which the product is really purchased. This threshold depends on the product and is unknown for focal product. On a side note: The question has been asked twice, in slightly different forms. This has been done because the appendix containing the specifics of usage of the measure could not be accessed and other literature was not found containing it. Moreover, it allows these questions to be used as a measure of attentiveness.

3.3.4 Hedonic and utilitarian components of product attitude

Disciplines such as sociology, psychology, and economics have long been interested in the investigation of hedonic and utilitarian components of product attitude (Voss et al., 2003). The first real measure appeared in 1991 and has been developed by Batra and Ahtola. It became one of the most commonly used scales, which unfortunately turned out to be problematic in nearly all publications using it (Crowley et al., 1992; Voss et al., 2003). To solve these problems Voss et al. (2003) initiated a study to develop a new, more reliable and valid measure. This study has been widely accepted by literature as WebofScience denotes 338 citations and Google Scholer denotes 1.307 citations, which is considerable. Additionally, research has shown retest reliability (Okada, 2005) causing sufficient trust to use the measure of Voss et al. (2003). This measure consists of ten questions. Five of which are related to hedonic use and five to utilitarian. After consulting the main author of the article the question statements themselves were able to be replicated for this research.

3.3.5 Net promoter score

The net promoter score will be measured using the measure of Reichheld (2003). This question asks the respondent the following question: *"How likely is it that you would recommend SmartGoals to a friend or colleague?"*. For this question Reichheld advises a ten point rating scale from extremely likely to extremely unlikely and is asked twice. It is asked twice as a measure of attentiveness. Consequently, if a reasonable mismatch is detected between these questions the observation is deleted.

3.3.6 Bogus questions

In order to establish who carefully answered the questions in a survey, Curran (2016) suggests to use questions that look, at first glance, the same but are in fact different. This could help identify respondents who are careless and provide invalid response. Therefore, two of such measures were implemented. One which relates to the hedonic and utilitarian questions. Another related to the perceived usefulness questions. However, it has to be noted that such measures could also have side-effects such as potentially offsetting those who are being attentive.

3.3.7 Google Analytics

In order to retrieve information about the visitor, Google Analytics has been implemented on the websites. Google Analytics gathers data on how the users use the website (Table 4.1). Due to the availability of timestamps on the surveys and those active on the website (and

campaign info for those visiting the website), these data have been linked. However, this was not possible for all data points as some data seemed to be missing. This may be due to privacy settings of the individual. In total approximately ninety-four percent of the used survey data has been linked. For the data that has been linked the following variables have been acquired: operating system, browsing software, screen resolution, time entering, and time leaving. Table 4.5 shows more details on the users of the websites.

3.3.8 Jobs and influence

At the end of the survey, all respondents had the option to fill in their email address. Either to receive the results after the research and/or to participate in a lottery to win the incentive. Most of these addresses could subsequently be used to identify one's general function and influence. For one's function multiple categories have been made. One indicating directors, (con-)rectors, and board members. The others for sub-functions specific to the different markets which consist of teachers, deans, board members of sub-committees, and physiotherapists. At the same time this has been used as a way to identify a general sense of influence of an individual in the buying process. For this two categories have been made. The first are the high influencers, or indirect beneficiaries. The other category contains the other individuals with moderate influence i.e. the direct beneficiaries. It has to be recognised, however, that this is a general measure and is not likely to be the most accurate depiction of one's influence because that would depend on many variables and differ per organisation.

3.4 Statistical considerations

After the careful removal of respondents who didn't bother to look at the website, calculating the mean scores[6] for the latent constructs, and linking the data manually to the data gathered by Google Analytics, the data went through a filtering process. During this process careless and invalid respondents were removed. Also those who have already seen the focal product in practice are removed to ensure the website is their first contact point with the product. Therefore, minimizing the risk of data contamination. Additionally, outliers are detected and, if necessary removed (3.4.1). Unfortunately, this process made the amount of data shrink from 262 respondents to 206. Finally, before any analysis can be done, it has to be checked if the statistical assumptions have been met (3.4.2). Whereas, the hypotheses will all be tested in comparison to mixed appeal. The data and analyses themselves can be found when following subsequent link. On a side note: the Likert scale (ordinal) data is treated as continuous since Norman (2010) argues parametric statistic tests, such as multiple regression, are robust with respect to violations.

3.4.1 Data cleaning and outlier detection

Before any analysis can be done, the data has to be checked if there is data missing. Secondly, careless and invalid responses have to be identified. Especially, since these could bias the outcome. Third, outliers are identified and evaluated. Finally, to analyse the focal research

[6] A deliberate choice has been made to use mean scores because preliminary data analysis showed no large differences in p-values when construct scores were calculated using factor scores. Additionally, mean scores allow for easier interpretation of the results.

question all those who have already seen the product in practice are removed excluded from the main regression analyses.

Missing data

The survey data itself didn't require any steps to be taken due to missing data, as there was no data missing. The data acquired using Google Analytics, did however contain some missing data since not all survey data could be linked to the corresponding data from Google Analytics. No imputation method has been used, as this could potentially bias the output.

Careless and invalid responses

In order to establish who carefully answered the questions in the survey, Curran (2016) suggests to use bogus questions. These are questions that on first sight look the same, but are in fact different and actually are more a measure of attentiveness. Two of these measures have been incorporated. The first step in this was to remove the individuals whose response of net promoter score or purchase probability were too different. For this the random choice has been made to exclude all those whose scores were more than two points away. Additionally, from the two implemented bogus questions one showed significant differences in how answers were given related to attitude towards the website, usefulness and utilitarian. This was the 'don't select me - select me' question, where respondents had to click on the right scale point in order to get some information about the attentiveness of the respondent. It turned out that more than half (107 vs 99) got the question wrong and scored significantly lower (Table G.15). Since more than half of the respondents wrongly answered this question, the invalid responses are not removed. Neither are those of the other questions since that doesn't have a significant impact. A more elaborate discussion on the influence of these questions can be found in section 5.3.4.

Outlier detection and evaluation

When collecting data for research, one will also get outliers. Outliers are those observations that are distinctly different from the bulk of the observations done due to a unique combination of variable values. Generally, these are unusually low or high values (Hair et al., 2013). Due to these properties, outliers can have a significant influence on the form of the data (Fox, 2009). The detection of these observations is done using the mahalanobis distance, and plotting these in a boxplot. All those values outside of the whiskers are considered outliers. The mahalanobis distance is a measure which evaluates an observations' position relative to all the other observations. When applying this measure, to the sample eleven outlying values are detected. However, before any outliers can be deleted each outlier has to be evaluated. This is because an observation, even though it is an outlier, may still be legitimate (Osborne and Overbay, 2004). The evaluation of the observations marked as outliers, doesn't show anything unusual. Therefore, the outliers are kept in the model. However, the regression analyses without these outliers have been done as part of the robustness analysis and are discussed in 5.3.3. The results themselves are depicted in appendix G.4. It shows, the hedonic related models are mainly being affected from the removal of these outliers. On a side note: dfBeta has also been taken into account, as it identifies values with a high leverage on the p-value, but quickly became irrelevant since the general rule of thumb (dfBeta>1) hasn't been met by any observations (Cohen et al., 2003).

3.4.2 Regression analysis

The main analysis technique used in this research is multiple regression. This technique is based on multiple assumptions, which have to be checked in order for the results to be valid. Therefore, before reporting any result these assumptions have been checked. Hair et al. (2013) discusses all four of these. The first is that multiple regression assumes there is a linear relationship. This assumption is checked visually in R (R Core Team, 2017) using added variable plots after a regression has been done. None of the regressions seem to be violating this assumption. Secondly, constant variance of the error terms is assumed, also called homoscedasticity. This assumption is checked using the Bruesch pagan test. For those that violated this assumption Hair et al. (2013) argues that heteroscedastic corrected standard errors should be used. This alteration has been done for one model. This was where attitude towards the website and perceived usefulness both were set to predict purchase probability. Third, independence of the error terms. This means that the predicted value should not be related to any other prediction. Such an occurrence is according to Hair et al. (2013) best to be analysed by plotting the residuals against any possible sequencing variable. These plots have been made, and no extraordinary results were spotted. Fourth, normality of the error term distribution is assumed. Normality has, at least, been checked using normal probability plots, and is for certain predictions violated. However, the normality assumption is most important for small samples which this is not. Therefore, since all assumptions were met no problems occurred.

3.4.3 Model selection

There is a vast amount of literature regarding model selection. More specifically, goodness of fit measures to determine what model would be best to use. For this research a selection of two measures have been applied, the Akaike information criterion (AIC) and the Bayesian information criterion (BIC). For both measures a lower value would statistically indicate that it is a better model.

3.4.4 Mediation

One of the main interests for this research is to identify whether there are causal mechanisms. The standard procedure for this is called mediation analysis, which can be done using various techniques (MacKinnon et al., 2007). For this procedure bootstrapping is often preferred as it is one of the better methods according to Preacher and Hayes (2008). In order to identify whether there are any direct or indirect effects, the mediation package in R is used (Tingley et al., 2014). More specifically, the model-based causal mediation analysis tool within that package. It incorporates all major functionalities required for mediation analysis, whilst keeping it easy to use. A disadvantage would be that its internal processes cannot be easily followed, making it somewhat more difficult to comprehend what exactly is going on. However, it produces reproducible outcomes and is considered reliable as its used widely. Tingley et al. (2014) notes that when using non-binary treatment variables, such as the treatment variable of interest (Appeal), two contrasts have to be set. Meaning two values have to be set which are compared. Since rational and emotional appeal are of main interest, these are used throughout the mediation analysis reported in this document[7]. The main output of the mediation package

[7]The other contrast combinations have been checked in R.

are the average causal mediation effects (ACME), average direct effects (ADE), total effects (ACME + ADE), and the mediated proportion (Prop. Mediated). Consequently, an effect is said to be mediated when ACME and the total effect are both significant (Preacher and Hayes, 2008). Whereas, ADE is different from a direct regression from independent to dependent variable because it is controlled for the mediator. For the estimation of these effects, one has to take into account that bias corrected and accelerated confidence intervals are used. This has been done because Tingley et al. (2014, see page 8) recommends to use it.

Mediation analysis is strongly based on sequential ignorability assumption. Before any conclusions can be made when an effect is significant, this assumption has to be checked if it is met. This has been done by plotting the outcome of the function 'medsens' supplied in the mediation package. Such a plot basically depicts how the ACME and/or ADE reacts to changes in rho. Where rho is the sensitivity parameter representing the correlation between the residuals of the mediator and outcome regressions (Tingley et al., 2014). The wider the movement area in such a graph is, the more sensitive the analysis leading to different conclusions is (Imai et al., 2010).

Chapter 4

Data

For research, proper data collection is key. Collecting enough responses proved challenging throughout the process. For some markets more than others (4.1). In order to get a basic idea of what data there is, and what it represents the generic information about the data is discussed (4.2). Furthermore, correlations between the variables shows how it moves together, and thus broadens the basic knowledge of the acquired data 4.3. During the time an individual visited a website, data from the (potential) respondent has been gathered using Google Analytics. Therefore, allowing this research to get some more knowledge about the respondent without any effort required by the person in question. In addition, the email addresses respondents filled in have been used to attain knowledge of the job function of someone (4.4).

4.1 Data collection process

For this research more than sixteen thousand mails have successfully (Appendix D) been sent using multiple company e-mail addresses. This has been done using mailing automation systems such as SendGrid and MailChimp. For the maximisation of the responses A/B tests have been done. Using these tests, different subjects of an email can for example be tested. Where, subsequently, the best is chosen and send to the remaining e-mail addresses. This process lead to 206 valid and usable respondents (Table 4.1). Response rates varied per market even though the same processes have been used constantly (Average response for valid respondents is 1.28%). Standing out from all are the hockey respondents, which make up at least thirty-seven percent of the total amount of respondents. This is twice the number of the second largest category, football clubs. The second and third are the football clubs and those active in physical education, which make up almost nineteen and eleven percent respectively. The lowest two, fitness and football schools only represent a margin of the total amount of respondents. Fortunately, when looking at the distribution of appeals themselves, it is fairly equal. As in total there are sixty-three respondents for emotional appeal, sixty for mixed and eighty-three for rational appeal.

4.2 Means and markets

A first look at the data shows that the mean values for all variables (compared by appeal) lie fairly close together (Table 4.2). Where the means for the constructs measured using a

Table 4.1: Amount of respondents per market and appeal

	Appeal	Frequency	Percentage per category	Percentage of total	Total frequency	Total percentage
Football clubs	Emotional	13	26,53%	6,31%	49	18,70%
	Mixed	14	28,57%	6,80%		
	Rational	22	44,90%	10,68%		
Hockey	Emotional	35	35,71%	16,99%	98	37,40%
	Mixed	27	27,55%	13,11%		
	Rational	36	36,73%	17,48%		
Physiotherapy	Emotional	7	35,00%	3,40%	20	7,63%
	Mixed	6	30,00%	2,91%		
	Rational	7	35,00%	3,40%		
Fitness	Emotional	2	33,33%	0,97%	6	2,29%
	Mixed	3	50,00%	1,46%		
	Rational	1	16,67%	0,49%		
Physical education	Emotional	5	17,86%	2,43%	28	10,69%
	Mixed	8	28,57%	3,88%		
	Rational	15	53,57%	7,28%		
Football schools	Emotional	1	20,00%	0,49%	5	1,91%
	Mixed	2	40,00%	0,97%		
	Rational	2	40,00%	0,97%		
Total		206				

one to seven Likert scale all lie fairly close to the middle, which is four. First to stand out is the apparent order of low to high for every variable (except for a hedonic attitude towards the product) in favour of rational appeal. Moreover, on most constructs mixed appeal had the lowest score. Secondly, when consulting table 4.3, which displays the means per category, it can be seen there are a few outstanding values (based on visual inspection) which could be due to the different markets representing different values. Additionally, table 4.4 shows that the majority of respondents think the most important thing about the product is that it makes training more fun and dynamic.

4.3 Correlations

The correlations of the construct variables, which are the average scores of all variables connected to the same construct, have been plot (Figure 4.1). This in order to get an adequate depiction of how the variables move relative to each other. The choice has been made to do this visually, since this allows to easily get an adequate depiction of the direction and size. The highest correlating variables are usefulness with net promoter score, utilitarian with net promoter score and, utilitarian with usefulness.

4.4 Information of the website visitors

The data collected by Google Analytics allowed the calculation of the average time spend on the website, which was 147 seconds. However, this value is not likely to be the actual active average viewing time of the website. At least, that's the suspicion because of the fact that there are some extreme values present which might not be the truest depiction of how long someone actively viewed the website. Moreover, the amount of computer/laptop, tablet and mobile users doesn't coincide with the information the users gave. Therefore, the decision has

Table 4.2: Mean and standard deviation per variable

	Mean			Std. deviation			*N*
Appeal	Emotional	Mixed	Rational	Emotional	Mixed	Rational	
Attitude		4.76			1.24		206
Higher=better (1-7)	4.77	4.58	4.90	1.24	1.32	1.17	206
Net Promoter Score		4.22			1.36		206
Higher=better (1-7)	4.22	4.10	4.31	1.35	1.29	1.43	206
Perceived Usefulness		4.53			1.11		206
Higher=better (1-7)	4.55	4.34	4.64	1.16	1.06	1.11	206
Utalitairian		4.67			0.96		206
Higher=more utilitair (1-7)	4.62	4.57	4.78	0.87	0.99	1.01	206
Hedonic		4.90			1.12		206
Higher=more hedonic (1-7)	5.08	4.96	4.72	0.99	1.06	1.23	206
Purchase Probability		3.70			1.97		206
Higher=better (1-10)	3.82	3.32	3.90	2.14	1.72	1.98	206
Time on website (s)		147.09			230.37		194
	117.03	142.89	173.18	192.48	244.64	246.45	194
Time used for survey (m)		6.90			8.11		194
	8.90	6.98	5.30	11.89	7.63	2.93	194

Table 4.3: Means per category

Added variable	Hedonic	Utilitarian	Product use	Attitude	Usefulness	Purchase probability	Net promoter score	N
Football clubs	4.78	4.38	0.93	4.39	4.43	3.49	3.87	49
Hockey clubs	5.29	4.76	0.90	4.88	4.64	3.70	4.33	98
Physiotherapy	5.62	4.92	0.87	5.10	4.28	4.45	4.75	20
Fitness	5,00	4.77	0.96	4.83	4.88	4.08	4.83	6
Physical education	3.14	4.73	1.61	4.87	4.52	3.52	3.96	28
Football schools	5.32	4.48	0.86	4.13	3.83	3.60	4.10	5

Note: The grey cells mark the values that stand out the most

Table 4.4: A summary of what respondents find most important

What's most important	Frequency	Percentage
It makes training more fun and dynamic	112	54,37%
It makes me perform better	5	2,43%
It enables me to set up a training or exercise easily	8	3,88%
It adds a gaming element to the training or exercise	51	24,76%
It makes my club/organisation more appealing for members and volunteers	18	8,74%
Other negative	5	2,43%
Other positive	2	0,97%
Don't know	5	2,43%

Note: *These questions are translated to English*

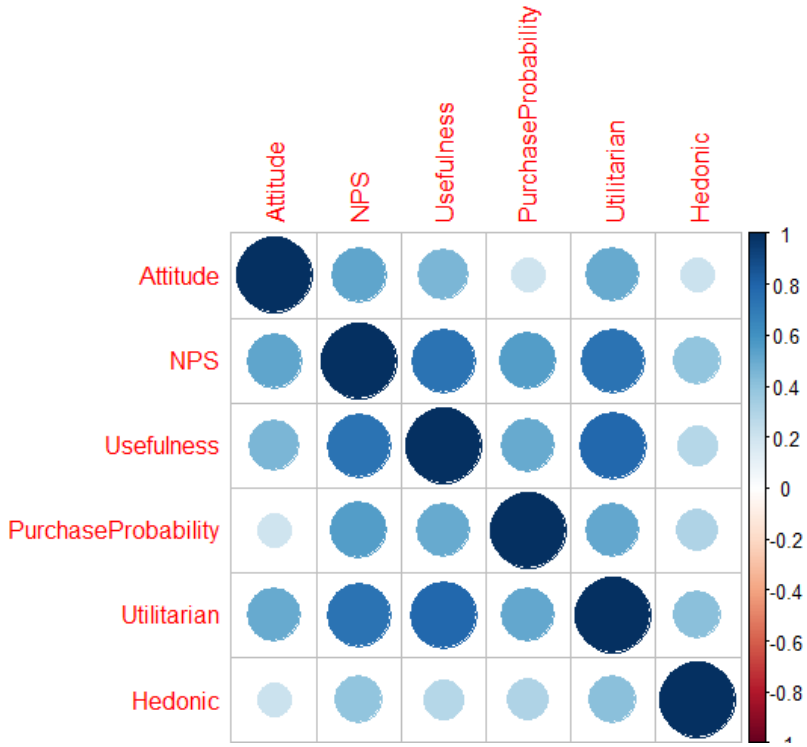


Figure 4.1: Correlation matrix plotted using the corrplot package (Wei and Simko, 2017)

been made to not remove any respondent based on the amount of time spend on the website. On a side note: the data shows that respondents needed on average almost seven minutes to complete the survey. Table 4.5 shows more details on the users of the websites.

As previously discussed (3.3.8), job functions and one's influence are identified using the retrieved email addresses. In total this was possible for hundred-twenty-five valid respondents which is almost sixty-one percent. Thirty-nine percent of those can be identified as moderate influencers, whilst the other sixty-one are high influencers (or indirect beneficiaries) in the buying process. This the sampling has been done reasonably well because more than half of the respondents are high influencers. The moderate influencing group consists of teachers, deans, board members of sub-committees, and physiotherapists. The moderate influencing group is expected to be more likely to see the benefit of the product as these are the one's who would use it. The high influencers (Directors, (con-)rectors, and board members) are on the other hand only likely to indirectly benefit from the product. Through for example increased customer satisfaction or retention.

Table 4.5: Information about the website visitor

		Frequency
Browser	Safari	63
	Chrome	53
	Internet Explorer	37
	Edge	25
	Firefox	18
Operating system	Windows	115
	iOS	37
	Macintosh	33
	Android	9
Device type (Google Analytics)	Computer/Laptop	141
	Mobile	42
	Tablet	11
Device type (User)	Computer/Laptop	159
	Mobile	35
	Tablet	12

Chapter 5

Results

The collected data is analysed using R since this allows for the greatest amount of reproducibility of this research, and flexibility during the analysis process. In order to gain insight into the analysis process the following link can be clicked (5.1). After the main hypotheses are tested, several other analyses are done. Such as testing what the effect of device type is on the results, and whether the appeals actually are as they are presented (5.2). Finally, the results regarding the reliability of the measurements and validity of the results are depicted (5.4). On a side note: when running the main regressions without outliers, the hedonic related models are mainly being the affected ones (Appendix G.4). On a side note: The regression tables used in this chapter are generated using the stargaze package available in R (Hlavac, 2015).

5.1 Testing the hypotheses

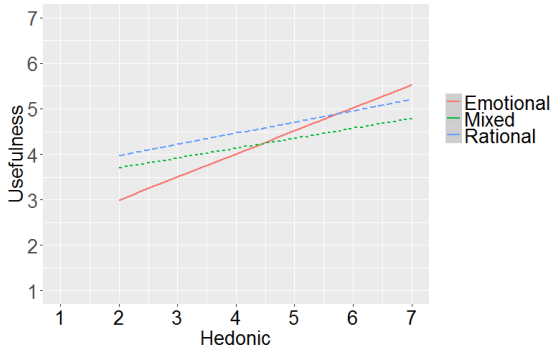
The hypotheses presented in chapter 2 are tested using a level of significance of 0.05. First to be tested are the effects related to perceived usefulness (5.1.1). After which the effects on attitude towards the website are tested (5.1.2). Also, the effects of attitude towards the website and perceived usefulness on net promoter score and purchase probability are tested (5.1.3). Finally, the hypotheses imply a causal relationship from appeal to net promoter score and purchase probability. This could be direct or indirect, and is researched using mediation analysis (5.1.4).

5.1.1 The effects on perceived usefulness

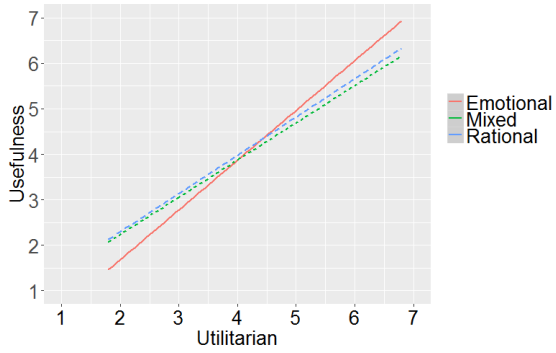
The results (Table 5.1 and 5.2) show that utilitarian is of particular importance in predicting usefulness in this case. First, because adding utilitarian to the models and testing its adequacy against other models using multiple wald tests (Table 5.3) implies this. Secondly, because when hedonic (Table 5.1 model two) or utilitarian (Table 5.1 model three) are separately added both are significant. But when both are added simultaneously, only utilitarian is significant. which is also shown in the interaction results (Table 5.2). Third, the coefficient of utilitarian in explaining usefulness is higher. This difference can be visually depicted by comparing the interaction plots displayed in 5.1b and 5.1a, where the lines in figure 5.1b have on average a higher increase. Finally, utilitarian seems to be explaining something since it increases the (adjusted) r-squared quite dramatically — which hedonic is not doing. Only

in two models, one of the appeals has a significant effect. One of which is in case hedonic is individually added to the model (Table 5.1 model two). Then rational appeal becomes significant (or mixed appeal when reference category is changed to rational appeal). Rational appeal is found most important in comparison to the other appeals in this case. The other case in which one of the appeals becomes significant, is when hedonic and utilitarian are added as moderator. Then emotional appeal is found to be significant (or mixed appeal when reference category is changed to emotional appeal). When looking at the interaction plots, there are some patterns visually recognizable (Figure 5.1). As these results differ substantially for appeal two wald tests have been performed to find out what the effect would be of adding appeal to a base model what only contains hedonic or utilitarian. The results, as shown in table 5.3, indicate appeal is not a significant addition to the model i.e. it does not explain much.

In order to determine what these results would imply for the stated hypotheses regarding perceived usefulness, it is first of importance to select a model. This is done by evaluating a combination of goodness of fit measures, AIC and BIC, and the adjusted r-squared. These show that only hedonic (and its interaction counterpart) is a poor predictor. The best AIC and BIC values are achieved in the models with only utilitarian (and its interaction counterpart). However, the models that contain both utilitarian and hedonic are not that far off. Statistically speaking, the utilitarian models would be preferred. However, as the combination of hedonic and utilitarian theoretically provide more insight into the subjects these will be used for hypothesis testing (Table 5.2 model three). Consequently, hypothesis 2a is accepted (p=0.031)[1]. Although it has to be noted that the GVIF$^{1/(2*Df)}$ (VIF equivalent corrected for the additional dimensions) is 5.71 which is fairly high. Meaning that this outcome is likely to be biased. We fail to accept hypothesis 2b, 5a and 6a. Additionally, we fail to accept hypothesis 5b because in the combined model it is insignificant (model three). However, if only the utilitarian interaction model (model two) would be taken, utilitarian is then observed to moderate the relationship between emotional website appeal and perceived usefulness of the product, but in a positive direction instead of a negative. Whereas hypothesis 6b would follow the same line of reasoning if the contrast is moved to emotional appeal. Do note that all hypotheses are tested in contrast to mixed appeal.



(a) Interaction effect of hedonic on perceived usefulness



(b) Interaction effect of utilitarian on usefulness

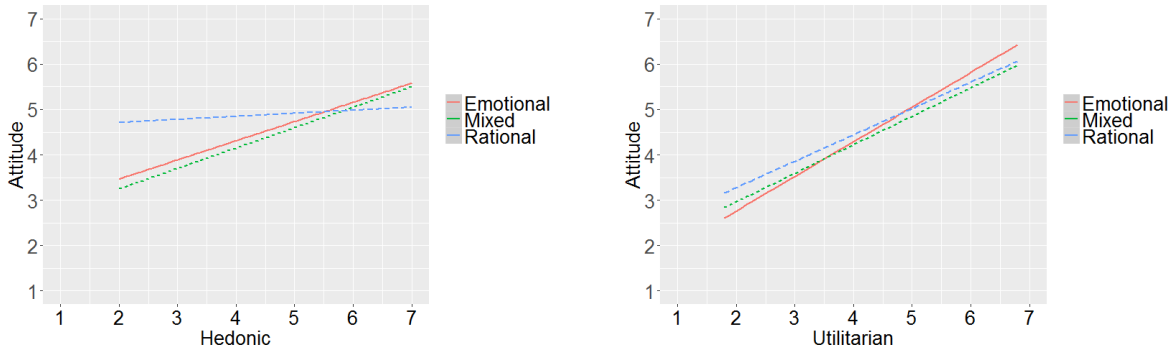
Figure 5.1: Interaction effects of appeal on usefulness

[1]Do note that the acceptance would be dependent upon the chosen regression model

5.1.2 The effects on attitude towards the website

The difference between on the one hand emotional and mixed appeal and on the other rational appeal is significant for the hedonic interaction model (Figure 5.2a; Table 5.2 model four). Therefore, due to the chosen reference category a rational appeal is significant in the hedonic interaction model (Table 5.2 model four). In this model also hedonic attitude and the interaction between hedonic and rational are significant. For the other models related to attitude towards the website none of the appeals are significant, whilst the interaction plots do show some (more subtle) differences (Figure 5.2). When looking at the data a pattern emerges, again, showing the apparent importance of utilitarian. This is because in the combined models (Table 5.1 model eight and table 5.2 model six) only utilitarian is significant whilst when hedonic and utilitarian are separated, both are significant. Analysing this using wald tests (Table 5.3) confirmed the heightened importance of utilitarian in the models. This also might explain the relatively large increase of adjusted r squared when adding utilitarian.

Evaluating the goodness of fit measures for the models related to attitude shows all models are relatively close to each other. However, since the adjusted r-squared for the models containing only hedonic (and its interaction counterpart) are relatively small the choice has been made to use the interaction model containing both hedonic and utilitarian. Using this model none of the hypotheses related to attitude towards the website are accepted, which are H1a, H1b, H3a, H3b, H4a, and H4b.



(a) Interaction effect of hedonic on attitude

(b) Interaction effect of utilitarian on attitude

Figure 5.2: Interaction effects of appeal on attitude towards the website

Table 5.1: Regression results on perceived usefulness and attitude towards the website

	Dependent variable:							
	Perceived usefulness				Attitude towards the website			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	0.211	0.176	0.164	0.168	0.184	0.154	0.151	0.149
(ref=mixed appeal)	(0.200)	(0.191)	(0.126)	(0.126)	(0.223)	(0.218)	(0.194)	(0.194)
Rational appeal	0.294	0.368**	0.106	0.091	0.312	0.375*	0.178	0.184
(ref=mixed appeal)	(0.188)	(0.180)	(0.118)	(0.120)	(0.209)	(0.205)	(0.183)	(0.185)
Hedonic		0.301***		−0.042		0.254***		0.018
		(0.067)		(0.049)		(0.076)		(0.075)
Utilitarian			0.897***	0.917***			0.641***	0.632***
			(0.051)	(0.056)			(0.078)	(0.087)
Constant	4.344***	2.849***	0.244	0.356	4.583***	3.323***	1.654***	1.606***
	(0.143)	(0.360)	(0.248)	(0.281)	(0.160)	(0.409)	(0.383)	(0.434)
Observations	206	206	206	206	206	206	206	206
R^2	0.012	0.102	0.613	0.614	0.011	0.062	0.258	0.258
Adjusted R^2	0.002	0.089	0.607	0.607	0.001	0.048	0.247	0.244
Residual Std. Error	1.110	1.061	0.696	0.697	1.236	1.206	1.073	1.075
	(df = 203)	(df = 202)	(df = 202)	(df = 201)	(df = 203)	(df = 202)	(df = 202)	(df = 201)
F Statistic	1.252	7.661***	106.591***	80.022***	1.112	4.483***	23.448***	17.518***
	(df = 2; 203)	(df = 3; 202)	(df = 3; 202)	(df = 4; 201)	(df = 2; 203)	(df = 3; 202)	(df = 3; 202)	(df = 4; 201)
Akaike Inf. Crit.	632.467	614.794	441.505	442.754	676.822	667.789	619.513	621.457
Bayesian Inf. Crit.	645.778	631.434	458.145	462.721	690.133	684.428	636.152	641.424

Note: *p<0.1; **p<0.05; ***p<0.01

Table 5.2: Regression results effect of the interactions on perceived usefulness and attitude towards the website

	Dependent variable:					
	Perceived usefulness			Attitude towards the website		
	(1)	(2)	(3)	(4)	(5)	(6)
Emotional appeal	−1.289	−1.110*	−1.588**	0.269	−0.475	−0.079
(ref=mixed appeal)	(0.965)	(0.637)	(0.730)	(1.089)	(0.992)	(1.134)
Rational appeal	0.214	0.012	−0.418	2.228**	0.405	1.359
(ref=mixed appeal)	(0.807)	(0.561)	(0.643)	(0.911)	(0.874)	(0.998)
Hedonic	0.217*		−0.168*	0.450***		0.229
	(0.130)		(0.096)	(0.147)		(0.148)
Emotional appeal:Hedonic	0.290		0.175	−0.027		−0.128
	(0.188)		(0.141)	(0.213)		(0.219)
Rational appeal:Hedonic	0.028		0.156	−0.383**		−0.355*
	(0.161)		(0.117)	(0.182)		(0.181)
Utilitarian		0.818***	0.899***		0.628***	0.517***
		(0.091)	(0.102)		(0.141)	(0.158)
Emotional appeal:Utilitarian		0.276**	0.191		0.135	0.186
		(0.136)	(0.156)		(0.211)	(0.243)
Rational appeal:Utilitarian		0.023	−0.053		−0.047	0.121
		(0.118)	(0.130)		(0.183)	(0.202)
Constant	3.267***	0.602	1.063**	2.350***	1.711**	1.083
	(0.661)	(0.424)	(0.498)	(0.746)	(0.659)	(0.773)
Observations	206	206	206	206	206	206
R^2	0.116	0.623	0.628	0.090	0.262	0.277
Adjusted R^2	0.094	0.613	0.613	0.067	0.243	0.248
Residual Std. Error	1.058	0.691	0.691	1.194	1.076	1.072
	(df = 200)	(df = 200)	(df = 197)	(df = 200)	(df = 200)	(df = 197)
F Statistic	5.234***	65.963***	41.641***	3.948***	14.165***	9.441***
	(df = 5; 200)	(df = 5; 200)	(df = 8; 197)	(df = 5; 200)	(df = 5; 200)	(df = 8; 197)
Akaike Inf. Crit.	615.660	440.305	443.070	665.6761	622.6168	624.2087
Bayesian Inf. Crit.	638.955	463.600	476.349	688.971	645.912	657.487

Note: *p<0.1; **p<0.05; ***p<0.01

Table 5.3: Results of waldtest; adding utilitarian and hedonic to the base model for attitude towards the website and perceived usefulness

	Dependent variable:							
	Perceived usefulness				Attitude towards the website			
Added variable	Res.Df	Df	F	Pr(>F)	Res.Df	Df	F	Pr(>F)
Base (appeal only)	203				203			
Hedonic	202	1	20.240	0.000	202	1	11.114	0.001
Utilitarian	202	1	313.42	0.000	202	1	67.394	0.000
Hedonic and utilitarian	201	2	156.87	0.000	201	2	33.567	0.000
Base (Appeal + Hedonic)	202				202			
Utilitarian	201	1	266.86	0.000	201	1	53.150	0.000
Hedonic interaction	200	2	1.533	0.218	200	2	3.012	0.052
Hedonic and utilitarian interaction	197	5	55.794	0.000	197	5	1.028	0.403
Base (Appeal + Utilitarian)	202				202			
Hedonic	201	1	0.735	0.392	201	1	0.055	0.815
Utilitarian interaction	200	2	2.557	0.080	200	2	0.436	0.647
Hedonic and utilitarian interaction	197	5	1.647	0.149	197	5	1.028	0.403
Alternative base (utilitarian only)	204				204			
Appeal	202	2	0.880	0.4165	202	2	0.518	0.596
Alternative base (hedonic only)	204				204			
Appeal	202	2	2.102	0.125	202	2	1.718	0.182

5.1.3 The effects on Net Promoter Score and Purchase Probability

The effects of perceived usefulness and attitude towards the website on net promoter score and purchase probability are in consecutive paragraphs discussed.

The effects on Net Promoter Score

Table 5.5 shows the main results after running a regression on the proposed relationship from attitude towards the website [H9] and perceived usefulness [H10] towards net promoter score. It shows that both attitude towards the website and perceived usefulness have a significant and positive influence on the net promoter score, separate and together. Where it can be noted that perceived usefulness has more influence than attitude does. Additionally, two wald tests show both independent variables are a significant contribution to the model (Table 5.4). Therefore, H9 and H10 are both accepted.

The effects on Purchase Probability

Separately both perceived usefulness and attitude towards the website have a significant and positive effect on purchase probability (Table 5.5). Joined together, however, only usefulness does. Therefore, a wald test has been done (Table 5.6). This shows that the model which only contains perceived usefulness as independent variable (Table 5.5 model five) is likely to be statistically the best model. This notion is marginally followed when consulting the AIC and BIC. For inclusiveness the model containing both perceived usefulness and attitude towards the website (model six) will be used. Causing hypothesis 8 to be accepted, whilst hypothesis 7 has not been accepted.

Table 5.4: Results of waldtest; adding utilitarian and hedonic to the base model for net promoter score

	Dependent variable:			
	Net Promoter Score			
Added variable	Res.Df	Df	F	Pr(>F)
Base (Perceived usefulness only)	204			
Attitude towards the website	203	1	23.623	0.0000
Base (Attitude towards the website)	204			
Perceived usefulness	203	1	147.89	0.0000

Table 5.5: Results effect on Purchase Probability and Net Promoter Score

	Dependent variable:					
	Net Promoter Score			Purchase Probability		
	(1)	(2)	(3)	(4)	(5)	(6)
Attitude towards the website	0.583***		0.273***	0.335***		−0.037
	(0.066)		(0.056)	(0.109)		(0.118)
Perceived usefulness		0.897***	0.759***		0.891***	0.910***
		(0.059)	(0.062)		(0.108)	(0.125)
Constant	1.444***	0.158	−0.517*	2.110***	−0.329	−0.239
	(0.323)	(0.273)	(0.294)	(0.538)	(0.501)	(0.703)
Observations	206	206	206	206	206	206
R^2	0.279	0.535	0.583	0.044	0.252	0.252
Adjusted R^2	0.276	0.532	0.579	0.039	0.248	0.245
Residual Std. Error	1.160	0.933	0.885	1.934	1.711	1.714
	(df = 204)	(df = 204)	(df = 203)	(df = 204)	(df = 204)	(df = 203)
F Statistic	79.055***	234.272***	141.937***	9.402***	68.722***	34.269***
	(df = 1; 204)	(df = 1; 204)	(df = 2; 203)	(df = 1; 204)	(df = 1; 204)	(df = 2; 203)
Akaike Inf. Crit	649.916	559.853	539.176	860.288	809.761	811.646
Bayesian Inf. Crit.	659.900	569.836	552.488	870.272	819.745	824.957

Note: *p<0.1; **p<0.05; ***p<0.01

Table 5.6: Results of waldtest; adding utilitarian and hedonic to the base model for purchase probability

	Dependent variable:			
	Purchase probability			
Added variable	Res.Df	Df	F	Pr(>F)
Base (Perceived usefulness only)	204			
Attitude towards the website	203	1	0.114	0.736
Base (Attitude towards the website)	204			
Perceived usefulness	203	1	56.575	0.000

5.1.4 Direct and indirect effects

One of the main interests for this research is to identify whether there are causal mechanisms i.e. if website appeal has a direct or indirect effect on the net promoter score or purchase probability. First a regression from appeal on net promoter score and purchase probability has been done (Table 5.7). The results show no direct effect. It, however, has to be noted that for the relationship from rational appeal to purchase probability the p-value is lower than 0.1. Which is due to the choice of cut-off value non significant but does show there is some effect. The results of the mediation analyses, which are depicted in appendix F, show that website appeal does not have any significant effect on net promoter score or purchase probability. Neither direct nor indirect[2]. However, when instead of the regular regressions a linear mixed model regression is done (Appendix F.2), thereby clustering the data on market category, the ACME is significant for all relationships containing only hedonic as covariate. Therefore, showing partial mediation. However, sensitivity analysis (Appendix F.2 figure F.6b) would show the analysis itself is quite sensitive and therefore possibly leading to a different conclusion than represented.

Table 5.7: Direct effects of appeal on net promoter score and purchase probability

	Dependent variable:	
	Net Promoter Score	Purchase Probability
	(1)	(2)
Emotional appeal	0.122	0.501
	(0.247)	(0.355)
Rational appeal	0.207	0.587*
	(0.232)	(0.333)
Constant	4.100***	3.317***
	(0.177)	(0.254)
Observations	206	206
R^2	0.004	0.016
Adjusted R^2	−0.006	0.007
Residual Std. Error (df = 203)	1.368	1.966
F Statistic (df = 2; 203)	0.400	1.697
Note:		*p<0.1; **p<0.05; ***p<0.01

[2]It also has been checked whether the use of factor scores (without the bad loading questions) produced any significant effect.

5.2 Secondary analyses

Determining how the websites actually are perceived is done by mailing a small portion of the sample and asking them on the hedonic and utilitarian components towards the website. Therefore, measuring website attitude which is different from attitude towards the website. This purports to measure how rational and emotional the website is (5.2.1). Additionally, an analysis has been done on the direct and indirect effects of utilitarian because previous analyses shows its importance (5.2.2).

5.2.1 Actual perceived website appeal

In order to test how the appeals are perceived, the emotional and rational appeals have been tested on their utilitarian and hedonic elements. The results from this test (Table 5.8) show there is no significant effect. This might be due to the small amount of respondents (even though more than five-hundred subjects were mailed). However, there is a difference noticeable between the appeals. Showing that a rational appeal is perceived somewhat more utilitarian than emotional appeal and vice versa for an emotional appeal.

Table 5.8: Regression results for checking utilitarian and hedonic attributes of the website

	Dependent variable:		
	Utilitarian	Hedonic	Hedonic + Utilitarian
	(1)	(2)	(3)
Rational appeal	0.667	−0.300	0.367
(ref=emotional appeal)	(1.441)	(0.726)	(2.121)
Constant	4.200***	4.900***	9.100***
	(0.943)	(0.475)	(1.388)
Observations	7	7	7
R^2	0.041	0.033	0.006
Adjusted R^2	−0.151	−0.160	−0.193
Residual Std. Error (df = 5)	1.886	0.951	2.777
F Statistic (df = 1; 5)	0.214	0.171	0.030
Note:			*p<0.1; **p<0.05; ***p<0.01

5.2.2 Direct effects of hedonic and utilitarian

The results in previous section show the importance of utilitarian. In order to get a full understanding of the direct effects, a regression is done using both hedonic and utilitarian as independent variables to explain net promoter score and purchase probability (Table 5.9). These results, again, confirm the importance of utilitarian in comparison to hedonic. First, because utilitarian is the only significant variable to explain purchase probability. Even though, when taken separately both influence purchase probability. Second, both hedonic

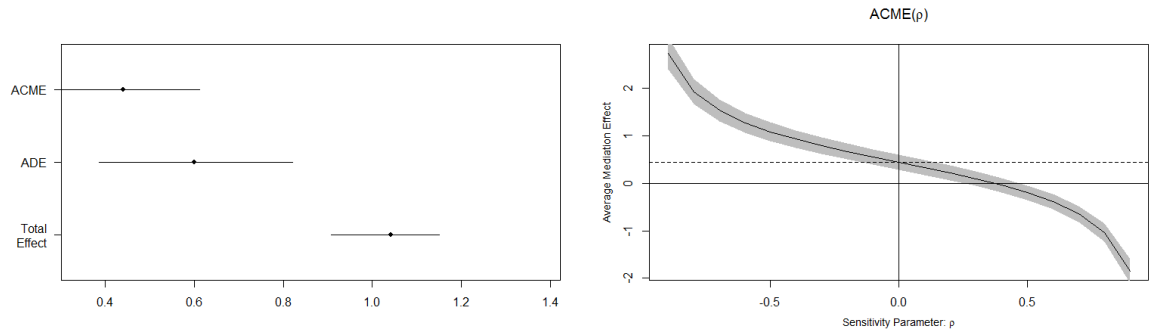
and utilitarian significantly affect net promoter score but utilitarian does so in a much more potently. In addition, a mediation analysis is done to see if perceived usefulness or attitude towards the website mediate the effects. This is only done for utilitarian because Batra and Ahtola (1991) argue consumer behaviour may be better predicted by attitudes if only the appropriate attitudinal sub-dimension is used, rather than both. The results show utilitarian has a significant direct (ADE), indirect (ACME), and total effect. One of these outputs is shown in table 5.10 and figure 5.3a. The results don't seem to become different when the contrast values are changed. Subsequent sensitivity analyses (Figure 5.3b) show that the outcomes are not that sensitive. Therefore, showing utilitarian has a significant impact on net promoter score and purchase probability.

Table 5.9: Regression results using hedonic and utilitarian to explain net promoter score and purchase probability

	Dependent variable:	
	Net Promoter Score	Purchase Probability
	(1)	(2)
Utilitarian	0.977^{***}	0.970^{***}
	(0.073)	(0.134)
Hedonic	0.133^{**}	0.196^{*}
	(0.063)	(0.115)
Constant	-1.001^{***}	-1.786^{***}
	(0.358)	(0.657)
Observations	206	206
R^2	0.552	0.281
Adjusted R^2	0.548	0.273
Residual Std. Error (df = 203)	0.917	1.682
F Statistic (df = 2; 203)	125.278^{***}	39.572^{***}
Note:		*p<0.1; **p<0.05; ***p<0.01

Table 5.10: Causal Mediation Analysis for Utilitarian ->Usefulness ->NPS

	Estimate 95%	Lower 95% CI	Upper 95% CI	P-value
ACME	0.441	0.287	0.61	$<2e^{-16}$
ADE	0.600	0.398	0.81	$<2e^{-16}$
Total Effect	1.041	0.903	1.15	$<2e^{-16}$
Prop. Mediated	0.424	0.264	0.59	$<2e^{-16}$
Note:			Using random contrast 3 and 4 for utilitarian	



(a) Mediation result graph

(b) Mediation sensitivity analysis ACME

Figure 5.3: Causal Mediation Analysis for Utilitarian ->Perceived usefulness ->NPS

5.3 Robustness

After doing the regression analyses, robustness of these analyses is of importance. Lu and White (2014) argue robustness checks are common exercise in empirical studies, where the core regression analyses are tested on how they behave in different situations. The first of these checks, splits the sample into two as Hair et al. suggest one should do to validate regression results (5.3.1). The second check incorporates the use of linear mixed models for if one of the basic assumptions of linear regression is violated (5.3.2). Second, outliers are removed which would check how sensitive the data would be (5.3.3). Third, the effect of the implemented bogus questions is analysed which is done by splitting the data up into those who had it wrong and right (5.3.4). Fourth, it is checked whether the type of device which someone used to open the website has any effect (5.3.5). Fifth, researching different markets could lead to different conclusions (5.3.6). The same would be true for those with different jobs and levels of influence (5.3.7). Seventh, those who have seen the product in practice are analysed (5.3.8). Finally, the data provided by Google Analytics could give some insight into how robust the data is (5.3.9). These robustness checks show that the acceptance of hypothesis 2a can be questioned.

5.3.1 Splitting the sample

Hair et al. (2013, p. 202) argues the most appropriate way to validate the results in multiple regression analysis is to test the models on a new sample. An alternative when acquiring a new sample is not possible, would be to split the data into two and test whether concurrent models still hold. The latter is used for validation purposes in this research using the sample function in R, which randomly splits the sample provided, to split the sample into a train (Table G.5) and test (Table G.6) set (80/20). The results of which can be found in appendix G.2. Again, the most important difference is that hypothesis 2a becomes insignificant. The rest of the results are in line with the main results projected in 5.1.

5.3.2 Linear Mixed Models

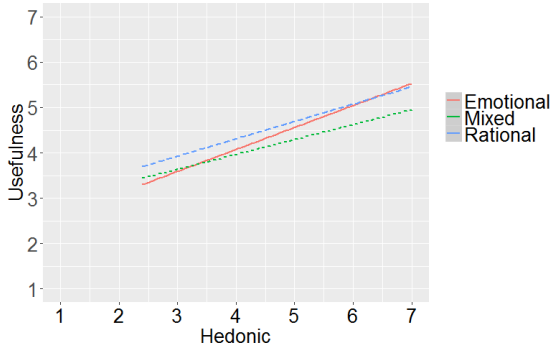
Given the method of data collection, one could argue that the regression assumption for independence of the error terms is violated. Violated because the data is structured per market category (or job function as expressed through influence), such as football clubs and physiotherapy. In order to gain insight into this matter, whether this possible violation has a significant influence on the outcome of the model the data has been modelled using linear mixed models. These models include clustering effects. Consequently, the hypotheses have been tested using a linear mixed model (Appendix G.3). Analysing the data using linear mixed models instead of regression, shows the same main conclusions (Appendix G.3 table G.9). Even though the R-squared for the hedonic market category model goes a factor three up. Whereas, it has to be noted that the interactions have not been done because of a contrasting error in R.

5.3.3 Outlier removal

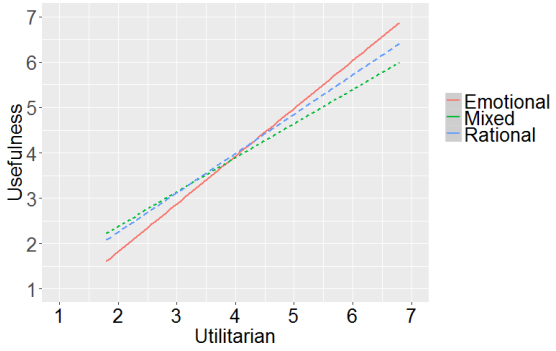
One way to check if the results are robust, is to remove outliers. Outliers are those observations that are distinctly different from the bulk of the observations (Hair et al., 2013). Causing such values to have relatively much influence on the outcome. The measure used in this research to detect outliers is the mahalanobis distance. The regression results without the mahalanobis outliers are depicted in table G.13 and table G.14 of appendix G.4. It shows, the hedonic related models are mainly being affected by becoming more or less significant. However, the selected models for hypothesis testing are not affected. Therefore, the hypotheses are not affected. Even though the conclusions regarding the hypotheses aren't significantly altered, the interaction plots do show some differences. Previously, figure 5.2a suggested that the level of attitude someone perceives towards the website when on a rational website is almost unaffected when using hedonic as moderator. This could seem logical because hedonic is all about fun and enjoyment, whilst for rational appeal it is all about logic. However, when the mahalanobis outliers are deleted the pattern (the almost constant level of attitude towards the website) is lost (Figure 5.4c). Therefore, visual inspection of the data has been done. Showing that the pattern without mahalanobis outliers may be right. Consequently, even with the addition of hedonic and utilitarian components of product attitude the data does not show appeal to have an effect or be moderated significantly.

5.3.4 Bogus questions and results

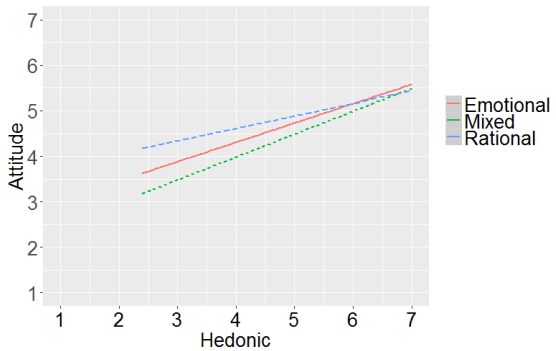
A regression analysis (Appendix G.5 table G.15) shows that there are some significant effects from the 'select me' question. These significant effects are on attitude towards the website, perceived usefulness, and utilitarian. Therefore, the datasets have been split into two samples. One for having this question wrong (Appendix G.5 table G.16) and one for having it right (Appendix G.5 table G.17). There are four main differences. Most importantly, rational appeal (Model two table G.16 and table G.17) loses its significant relationship to perceived usefulness in both cases. Secondly, hedonic loses its significance when predicting attitude towards the website when the question was answered wrong (Which coincides with the notion that when outliers are removed hedonic also is the one to suffer). Third, the signs for emotional and rational appeal become negative when predicting attitude towards the website (except for rational appeal in table G.16 model five). Fourth, the sign for emotional appeal in predicting perceived usefulness becomes negative (Table G.17 model two).



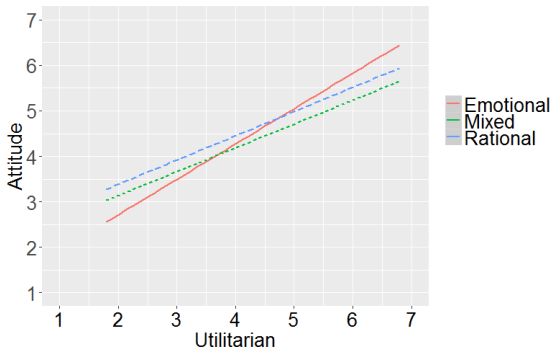
(a) Interaction effect of hedonic on usefulness



(b) Interaction effect of utilitarian on usefulness



(c) Interaction effect of hedonic on attitude



(d) Interaction effect of utilitarian on attitude

Figure 5.4: Interaction effects of appeal on usefulness and attitude towards the website without mahalanobis distance outliers

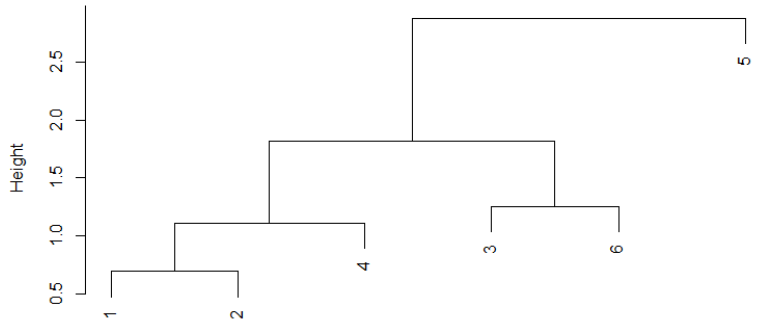
5.3.5 Open type

Compared to respondents opening the website with a computer or laptop, respondents using a mobile phone perceive the product (Appendix G.6 table G.18) significantly more useful, have an higher (more positive) attitude towards the website, see the product as more utilitarian and are more likely to promote the product. These conclusions can at least be taken when all other explanatory variables are left out of the model, as shown in table G.18. In order to see whether the type of device which is used to open the website influenced the results, separate analyses have been done for each (Appendix G.6). These results show that hypothesis 2a becomes insignificant. Therefore, questioning the results related to that hypothesis. The other results are not significantly altered.

5.3.6 Markets

In order to determine the influence of the different markets, a cluster analysis (i.e. groups, based on the market categories, that score similarly) has been done. Pair-wise mahalanobis distance is used for to cluster the data (Figure 5.5). This revealed that there are three generic categories, in which physical education is the most dissimilar. Surprisingly fitness was considered (in mahalanobis distance) more similar to football and hockey clubs, than football schools were to hockey and football clubs. These clusters are subsequently used to

split the dataset. This is done as it maximizes the differences whilst minimizing the amount of output to analyse. However, it has to be noted that these groups are unbalanced. Moreover, three clusters appear. First, football and hockey clubs are clustered together. Second, a (somewhat extended) cluster consists of physiotherapy, fitness and football schools (Which could be labelled organisations). Finally, the third cluster and most dissimilar group physical education. Most importantly, hypothesis 2a is only accepted for the second cluster. For the other two it is insignificant. Besides this, cluster one shows (Appendix G.7 table G.21) the same patterns as the earlier main results did. For cluster two (Appendix G.7 table G.23) the significance of the relationship from attitude towards net promoter score (H9) and from utilitarian towards attitude both vanished (Considering a=0.05). Besides that, the same pattern was shown. Cluster three (Appendix G.7 table G.25) made the relationships towards net promoter score insignificant (H9, H10). However, as cluster two and three only consist of a small amount of respondents the meaning of the disappearance of the significance levels can be questioned. Therefore, it can be concluded that the different market clusters do have some influence but not enough to question the main results. Except for hypothesis 2a. On a side note, the main patterns related to utilitarian and hedonic are still being followed.



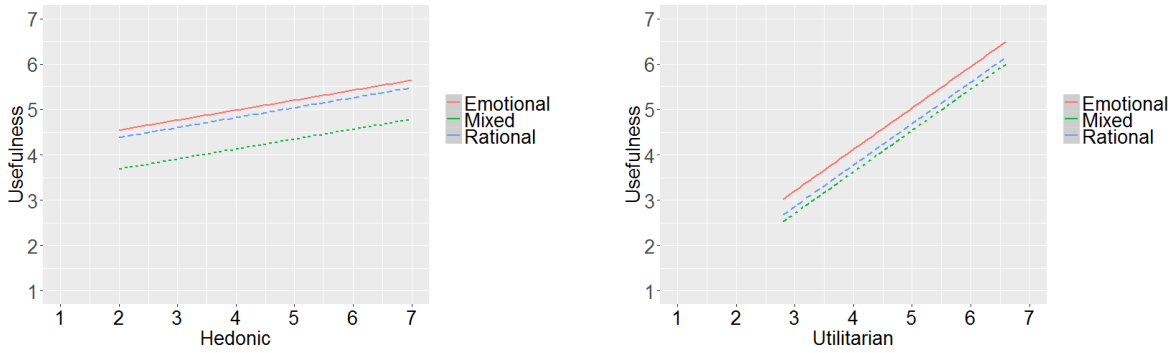
1:football clubs; 2:hockey clubs; 3:physiotherapy; 4:fitness; 5:physical education; 6:Football schools.

Figure 5.5: Dendrogram of clustered markets

5.3.7 Jobs and influence

An important factor to take into account in the B2B market is the different jobs. Or even better one's influence in the buying process. For this purpose the dataset has been split into two. One containing only those with high influence, and the other with the moderate influencers. Appendix G.1 shows the results when taking one's possible level of influence into account. Most importantly, table G.1 shows that perceived usefulness is influenced by website appeal for the moderate influencers group. Moreover, an emotional appeal results in the highest perceived usefulness. The interaction effects are depicted in figure 5.6a and 5.6b. These results clearly show that mixed appeal generates the lowest perceived usefulness. This finding is counter-intuitive compared to hypothesis 2a, which posited an negative effect of emotional appeal on perceived usefulness compared to mixed appeal. Moreover, multiple wald tests show that appeal is only a significant addition to the model when hedonic is used to predict perceived usefulness (5.11). Furthermore, website appeal only has an influence on attitude towards the website when hedonic is taken into account. Combining it with utilitarian

and the significance is lost. Furthermore, the results show hypothesis 2a is not accepted. Finally, none of these effects are (in)directly visible in the level of purchase probability or net promoter score.



(a) Interaction effect of hedonic on usefulness

(b) Interaction effect of utilitarian on usefulness

Figure 5.6: Interaction effects of appeal on perceived usefulness and attitude towards the website using the moderate influencing group

Table 5.11: Results of waldtest for moderate influencers

	Dependent variable:							
	Perceived usefulness				Attitude towards the website			
Added variable	Res.Df	Df	F	Pr(>F)	Res.Df	Df	F	Pr(>F)
Alternative base (utilitarian only)	47				47			
Appeal	45	2	2.8518	0.068	45	2	0.9149	0.408
Alternative base (hedonic only)	47				47			
Appeal	45	2	3.3857	0.043	45	2	2.5968	0.086

5.3.8 Who have seen the product in practice

It might be useful to analyse the data of the valid respondents (n=34) who have seen the product. Before this data is analysed, however, regression assumption analyses show that the residuals do not adequately follow a normal distribution. Unfortunately, data transformation did not resolve this. Therefore, the results have to be interpreted with caution. In addition, the purchase probability questions are not considered valid because many of these respondents already bought the product. As a consequence it is left out of this discussion. However, the results, shown in appendix G.11, do show the same main pattern regarding utilitarian and hedonic. Moreover, in certain models hedonic becomes insignificant. Furthermore, attitude towards the website does not have a significant influence on net promoter score. Causing hypothesis 9 not to be rejected.

5.3.9 Data from Google Analytics

Time on website

There doesn't seem to be any relevant effect for the time which someone was on the website on any of the variables (Appendix G.8 table G.27).

Time used to fill in survey

Taking enough time to fill in a survey could be argued to influence results (Curran, 2016) and validity of the results. Curran (2016) argues it is difficult to create concrete rules in the generation of the minimum amount of time it should take an respondent to answer. Therefore, it has been decided to use the mean time for this. Since the average time to fill in the survey (without the extreme outliers) lies around the five and a half minutes those who took less than three minutes are considered possible invalid responders. Also those who took more than fifteen minutes are considered invalid, as these fall outside of the whiskers when the amount of time used to fill in the survey was plotted in a boxplot. Therefore, both are removed. Subsequently, another regression has been done using only those respondents that fall within these limits. The results (Appendix G.9) show no significant deviation regarding the main conclusions of the hypotheses drawn in 5.1. Additionally, the same patterns regarding the apparent importance of perceived usefulness are observed.

Browser used

In order for an appeal to have effect it has preferably to be displayed the same in all browsers. This is, however, unlikely to happen as (small) deviations will always persist. These differences can express themselves in a visual way, but also technical such as differences in response time. For example, internet explorer is in general known for being slow. Therefore, each browsers may have a (somewhat) different effect and display a different pattern. Consequently, first a regression has been done for the effects of the different browsers on the mean scores of the constructs G.30. This has been done in contrast to the safari browser because that was the one which was used most often by the respondents. Most noticeable are the significant negative effects that 'Edge' has on almost all constructs. Additionally, the Firefox users have a significant negative effect on utilitarian whilst the Chrome users have a significant positive effect on hedonic. Therefore, the effects of the different browsers on the models are checked. First, however, a dissimilarity graph has been made by using the mahalanobis distance as a way of clustering (Figure G.1) because this would minimize the amount of separate analyses required. This shows that the edge users are most similar to those for whom it is unknown what browser they used[3]. Additionally, Firefox and Chrome users are most similar, and Safari and Internet Explorer users. The results of these analyses can be found in appendix G.10. These results question hypothesis 2a which was accepted, because in none of these separate analyses it can be accepted. Furthermore, for those who used Edge hypothesis 9 also becomes insignificant. Do note, that Edge has only used by twenty-five respondents. Therefore, making the insignificance of hypothesis 9 not worthwhile to reconsider. Additionally, the results do still follow the same pattern of significance of hedonic and utilitarian, as discussed previously.

[3]Of course, those from whom it is unknown will be excluded from further analysis as these would be incomparable

5.4 Validity and reliability

For every measure used it is important that it is reliable (5.4.1) and valid (Hair et al., 2013). Meaning it has to correctly measure the concept it represents (validity) and do so in a consistent manner (reliability). Validity (5.4.2) is partially assured by using proven measures. However, since the measures had to be translated to Dutch validity becomes a concern. The same is true for reliability.

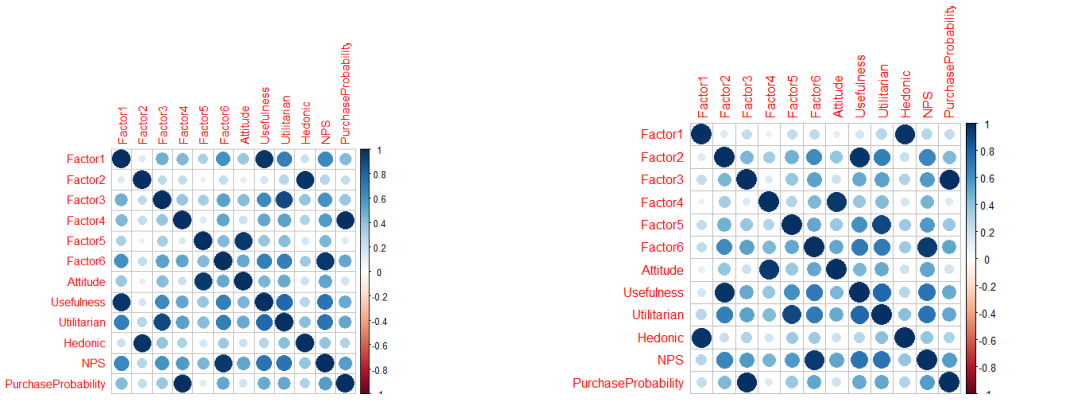
5.4.1 Reliability

According to Hair et al. (2013), reliability (limited here to internal consistency for this research) can be assessed using a series of measures. The first measures considered are the item-to-total correlation (Guttman's Lambda 6, which should be higher than 0.5) and the inter-item correlation (should be higher than 0.3). Additionally, Cronbach's alpha will be used for assessing an entire scale, for which values of 0.6 to 0.7 are deemed the lower limit of acceptability. Also the Omega measure will be used as Dunn et al. (2014) argue it is likely to be more appropriate than Cronbach alpha as it is less likely to over or under estimate the reliability. Third, factor analysis is used to see how well the questions load together. Analysis of the Cronbach Alpha and Omega values show that reliability is no issue (Table 5.12). Also, the item-to-total and inter-item correlations also exceed the required minima. Whereas, Cronbach Alpha is only relevant for multiple item measurements and not for those constructs who only use two questions. For these questions a correlation test has been done. These are the questions related to purchase probability and net promoter score, which both yield the result that there is a significant correlation (Table 5.13). In addition an exploratory factor analysis has been done to asses reliability. One of the preliminary decisions to make is to decide how many factors to use. Gelper (2015, see slide 11) discusses three methods that can be used, one of which is the derivation from theory. Given the goal for which exploratory factor analysis is used here, this method is used. Resulting in the use of six factors. Running the exploratory factor analysis on the twenty-three questions that are used to predict the six latent constructs shows mixed results (Table 5.14). First, these results show that the questions underlying attitude towards the website, net promoter score and purchase probability all load correctly. Secondly, however, for each of the other constructs there is one variable or question which doesn't load correctly. Therefore, questioning reliability.

In order to gain some more insight, a second factor analysis is done but now without the questions that loaded poorly (Appendix H table H.1). The removed questions were 'UT Noodzakelijk', 'HED Plezierig', and 'Useful useful'. Removing these questions increased the cumulative variance explained from 0.61 to 0.66. Whereas, the correlation plot (Figure 5.7) between the factors and the mean total scores per construct hasn't changed dramatically. Moreover, these plots do show that the factors are linked to the proper constructs. As a consequence, summated scales can be confidently calculated using factor scores of the factor analysis without the poor loading questions. These summated scales can be used, as Hair et al. (2013) suggested, for usage in regression analyses. This is done as an additional reliability/robustness check, in order to see if the pattern follows the main results[4] (Appendix H

[4]The summated scales have been calculated for both exploratory factor analyses (with and without poor loading questions). The one with the poor loading questions gives somewhat incongruent results, as could be expected. The exploratory factor analysis without the poor loading questions shows congruent results and is therefore used.

table H.2 and table H.3). However, these results have to be read with caution because the chi-square goodness of fit measure is significant. Therefore, rejecting the null hypothesis that there is no difference between the observed data and the hypothesized six-factor model[5]. The most important difference is that hypothesis 2a becomes insignificant. Additionally, there are some other changes in significance which are depicted in the grey cells of the table (Table H.2 and H.3). In total there are five not significant any more, and one that became significant. All of which are (indirectly) related to hedonic attitude. Thus emphasising the likely unreliability of hedonic. Moreover, this coincides with the observation made in 5.3.3 that hedonic is also the one to change when the outliers are deleted. Deleting the hedonic variables from the exploratory factor model does however not change the rejection of the null hypothesis. Furthermore, it has to be noted that the results show the same main patterns regarding hedonic and utilitarian. Finally, the reliability tests are extended to the resampling robustness check 5.3.1. This is done by to checking the Cronbach Alpha's for the test and training set (Table H.4). These results show reliability remains constant.



(a) Correlation plots with poor loading questions

(b) Correlation plots without poor loading questions

Figure 5.7: Correlation plots between the factors and the mean total scores per construct using the corrplot package (Wei and Simko, 2017)

[5]Only a nine-factor model would be produce a non-significant chi-square.

Table 5.12: Results of the internal consistency analysis

	Internal consistency:				
	Raw alpha	Std alpha	Omega	Lambda 6	Interitem correlation
Utilitarian	0,86	0,86	0,89	0,85	0,56
if item dropped:					
UT_Effectief	0,83	0,84		0,82	0,56
UT_Functioneel	0,81	0,81		0,78	0,51
UT_Noodzakelijk	0,88	0,88		0,86	0,65
UT_Nuttig	0,80	0,80		0,77	0,51
UT_Praktisch	0,84	0,84		0,83	0,57
Hedonic	0,88	0,88	0,91	0,88	0,59
if item dropped:					
HED_inspirerend	0,84	0,83		0,83	0,55
HED_Leuk	0,83	0,83		0,83	0,54
HED_Plezierig	0,93	0,93		0,91	0,76
HED_Opwindend	0,83	0,82		0,81	0,54
HED_Spannend	0,84	0,83		0,83	0,54
Usefulness	0,92	0,92	0,95	0,92	0,66
if item dropped:					
Useful_easeofuse	0,90	0,90		0,89	0,65
Useful_effective	0,90	0,90		0,89	0,64
Useful_faster	0,91	0,91		0,9	0,66
Useful_jobperf	0,91	0,91		0,89	0,66
Useful_producti	0,91	0,91		0,9	0,67
Useful_useful	0,92	0,92		0,91	0,69
Attitude	0,84	0,84	0,86	0,80	0,64
if item dropped:					
Att_beauty	0,70	0,70		0,54	0,54
Att_good	0,84	0,84		0,73	0,73
Att_liked	0,79	0,79		0,66	0,66

Table 5.13: Correlation test purchase probability and net promoter score

	Correlation tests		
Variables	Res, Df	Correlation	T
PP1 and PP2	204	0.9573	47.31***
NPS1 and NPS2	204	0.8449	22.155***
Note:		*p<0.1; **p<0.05; ***p<0.01	

Table 5.14: Results of factor loadings with all construct questions

	Standardized loadings						
	Factor1	Factor2	Factor3	Factor4	Factor5	Factor6	u
Att_beauty					-0.906		0.138
Att_good		-0.114			0.690	0.139	0.463
Att_liked			0.318		0.651		0.312
Useful_easeofuse	0.673		0.220				0.296
Useful_effective	0.716		0.217		-0.101		0.227
Useful_faster	0.767						0.284
Useful_jobperf	0.819				0.107		0.275
Useful_producti	0.762					0.103	0.335
Useful_useful	0.262		0.551			0.107	0.297
NPS1						0.920	0.038
NPS2			0.125	0.116		0.644	0.240
PP1				0.957			0.077
PP2				1.012			0.005
HED_inspirerend		0.852					0.255
HED_Leuk		0.860					0.255
HED_Plezierig	0.108	-0.133	-0.596		-0.131	-0.205	0.391
HED_Opwindend		0.950				-0.123	0.134
HED_Spnnend		0.808	0.115				0.240
UT_Effectief			0.588			0.158	0.434
UT_Functioneel			0.778				0.202
UT_Noodzakelijk	0.333		0.148	0.125		0.158	0.597
UT_Nuttig	0.189		0.697		0.107		0.214
UT_Praktisch	0.250		0.380	0.106	0.141		0.488

Note: Used factanal(x, factors=6, rotation = "oblimin", scores = "Bartlett") in R

5.4.2 Validity

There are a several distinct types of validity, some of which are relatively easy to measure whilst others are difficult or impossible. Convergent and discriminant validity are two types which are measurable. The latter is the extent to which a construct is truly distinct from other constructs whilst the former represents the extent to which the constructs correlate. Cole (1987) argues confirmatory factor analysis (CFA) is an adequate way to determine convergent (and discriminant) validity. The Lavaan package in R is used to set-up CFA (Rosseel, 2012). Before convergent validity can be assessed using CFA, several steps have to be taken. Hair et al. (2013) argue the first is to asses uni-dimensionality. This has been tested by statistically comparing two CFA's using several goodness of fit indices and an anova. The first CFA being one where all variables are tested on one construct, whilst the other is set-up using the distinct constructs the measures purport to measure. The results shown by model one, two and three of table 5.15, suggest the uni-dimensionality requirement is met. Subsequently, Hair et al. (2013) argues the fit of the models have to be assessed using several goodness of fit indices. For this research chi-square, CFI, LFI, RMSEA, SRMR, AIC, and BIC are used. Hair et al. (2013, p. 584) provides an easy table with guidelines for these goodness of fit measures in order to determine a statistically good fit. When a model shows a good fit it means it can be used. Only the six factor CFA without the poor loading questions (model four) from the EFA shows a good fit, as only the chi-square and the TLI do not meet the cut-off value. Therefore, the measurement model (CFA) is considered valid. In addition, convergent validity has been established using the AVE measure of Fornell and Larcker (1981), where originally Fornell and Larcker argues that these values should be higher than 0.5 (Hair et al., 2013, p. 605). Calculation, using the reliability function in R provided by semTools (semTools Contributors, 2016), shows this requirement has been met. Therefore, showing convergent validity. Discriminant validity has been proven by using the EFA described previously as the factors show not to load highly on other constructs. Remember, however, that three measures had to be omitted.

Subsequently, structural equations can be added to the CFA which can be used as an additional way to asses robustness, reliability and validity. This transforms a CFA into a Structural Equation Model (SEM), which can be used for model estimation. Table 5.15 shows that the models (Five and six) using website appeal as independent variable are a poor fit for the data. Further estimation using SEM is therefore not useful. Whereas, the model which uses utilitarian and hedonic as independent variables (without the poor loading questions) can be considered to have a moderate fit (model eight). The chi-square and LFI indicate poor fit. The CFI is just on the edge of acceptability. Whilst the SRMR and RMSEA indicate good quality. Correspondingly, the SEM has a moderate overall fit. Adding covariance between the constructs slightly worsens the fit (model nine). An additional anova between the CFA (four) and SEM (nine) model shows the CFA model better represents the data, which therefore does not support the theoretical SEM model. Therefore, the modification index in Lavaan is consulted to see what alteration would increase the fit[6]. This index argues adding a covariance between "Useful jobperf" and "Useful producti" would increase the fit the most. Since both variables fall within the same construct it is added to a new model (ten). Running an anova between this model (ten) and the CFA (model four) shows no significant difference. Therefore, providing supporting evidence that the SEM model (ten) improves the fit.

However, an additional direct and indirect model with hedonic and utilitarian is also tested

[6]It is recognised that theoretical justification is required in order to make adjustments to the SEM.

with an additional SEM analysis (model eleven, twelve, and thirteen). This is done because the data suggests that utilitarian directly influences purchase probability and net promoter score (5.2.2). Moreover, this notion is also supported by theory. For example, Voss et al. (2003) show utilitarian and hedonic influence purchase intention. Adding a direct relationship from hedonic and utilitarian to purchase probability and net promoter score improves the fit. Strangely, model eleven and twelve have identical goodness of fit values. Moreover, both values have a slightly better fit than the CFA. Just enough to cause an insignificant result when running an anova between the models (four vs. eleven&twelve). Therefore, the models with a direct effect of hedonic and utilitarian to net promoter score and purchase probability would be preferable. In addition, if again "Useful jobperf" and "Useful producti" are added (model thirteen) most goodness of fit values improve. In comparison to the other models this model would from a goodness of fit standpoint be superior. However, it will not be used for estimation of the regression results (using the SEM). For this, model twelve would be better because it is a cleaner representation of the theory behind the models. Therefore, the regression results using SEM model twelve are shown in table 5.16 and 5.17. These results show the same conclusions as drawn from the main regression results, except again H2a which is not rejected. Moreover, these results also show a significant effect of utilitarian on net promoter score and purchase probability. If the direct relationships of hedonic and utilitarian (model seven to ten) would not have been added, the main conclusions relative to those drawn from model twelve would have been the same.Whereas, it has to be noted that removing hedonic from the equation doesn't necessarily improve the model fit. In addition, also here the convergent validity requirements are met.

Table 5.15: Goodness of fit results for CFA and SEM using appeal

	ChiSquare	Df	P-value	CFI	TLI	RMSEA	SRMR	AIC	BIC
(1) One factor CFA with all variables	1995.222	230	0.000	0.562	0.519	0.193	0.131	14144.085	14297.167
(2) One factor CFA without bad loaders	1815.448	170	0.000	0.530	0.475	0.217	0.145	12591.253	12724.368
(3) Six factor CFA with all variables	657.807	215	0.000	0.890	0.871	0.100	0.117	12836.670	13039.671
(4) Six factor CFA without bad loaders	326.589	155	0.000	0.951	0.940	0.073	0.052	11132.394	11315.427
Appeal									
(5) SEM with all variables	1265.614	245	0.000	0.250	0.155	0.143	0.282	NA	NA
(6) SEM without bad loaders	932.506	182	0.000	0.349	0.249	0.142	0.256	NA	NA
Utilitarian + Hedonic indirect									
(7) SEM with all variables	674.019	220	0.000	0.887	0.871	0.100	0.122	12842.882	13029.243
(8) SEM without bad loaders	345.549	160	0.000	0.947	0.937	0.075	0.064	11141.354	11307.748
(9) SEM without bad loaders and covariance	345.511	159	0.000	0.947	0.936	0.075	0.064	11143.316	11313.038
(10) SEM without bad loaders and covariance	310.610	159	0.000	0.957	0.948	0.068	0.063	11108.415	11278.136
Utilitarian + Hedonic indirect & direct									
(11) SEM without bad loaders	326.958	156	0.000	0.951	0.941	0.073	0.052	11130.763	11310.468
(12) SEM without bad loaders and covariance	326.958	156	0.000	0.951	0.941	0.073	0.052	11130.763	11310.468
(13) SEM without bad loaders and covariance	293.470	155	0.000	0.960	0.952	0.066	0.051	11099.275	11282.308

Note:
NA values not available because appeal is ordinal causing diagonally weighted least squares to be used (Li, 2016)
For model 10 and 13 covariance between "Useful jobperf" and "Useful producti" has been added in addition to the covariance between the constructs
No covariance has been added for the appeal models as this resulted in unusable results

Table 5.16: Regression results from SEM model twelve using utilitarian and hedonic indirectly to predict purchase probability and net promoter score

	Dependent variable							
	Purchase probability				Net promoter score			
	Estimate	Std.Err	z-value	P(>|z|)	Estimate	Std.Err	z-value	P(>|z|)
Attitude towards the website	-0.103	0.082	-1.256	0.209	0.328	0.100	3.285	0.001
Perceived usefulness	0.265	0.087	3.051	0.002	0.531	0.111	4.778	0.000
Utilitarian	0.325	0.158	2.051	0.040	0.477	0.185	2.582	0.010
Hedonic	0.152	0.081	1.871	0.061	0.172	0.094	1.828	0.068

Note: model twelve from table 5.15 is used

Table 5.17: Regression results from SEM model twelve using utilitarian and hedonic indirectly to predict purchase probability and net promoter score

	Dependent variable							
	Perceived usefulness				Attitude towards the website			
	Estimate	Std.Err	z-value	P(>|z|)	Estimate	Std.Err	z-value	P(>|z|)
Utilitarian	1.222	0.143	8.564	0.000	0.746	0.109	6.825	0.000
Hedonic	-0.073	0.091	-0.795	0.427	-0.030	0.088	-0.345	0.730

Note: model twelve from table 5.15 is used

Chapter 6

Discussion

The main results accepted hypothesis 2a, stating that emotional website appeal negatively influences one's perceived usefulness of the product. However, most robustness analyses show it is unlikely to be true. Therefore, showing that website appeal doesn't affect any of the proposed variables. Whereas, it has to be noted that for the respondents denoted as moderate influencers — also called the direct beneficiaries — website appeal does have an effect on perceived usefulness. This effect is only not in the direction as proposed (6.1). The interaction of website appeal with hedonic and utilitarian components of product attitude does not influence perceived usefulness and attitude towards the website (6.2). The results show that one's perceived usefulness of a product positively and significantly influences purchase probability and net promoter score (6.3). Furthermore, attitude towards the website influences net promoter score positively (6.4). These results are in addition, at least, considered robust and reliable. Finally, analysis showed that there are no direct nor indirect effects of website appeal on purchase probability and net promoter score. However, utilitarian product attitude does have a direct and indirect effect on these variables (6.5). These findings suggest an alteration to the conceptual model used in this research (6.6). Given the sample, the inferences drawn in this research are generalisable to those active in the Dutch sporting industry. More specifically, amateur football and hockey clubs, physical education, and physiotherapy. In addition, also football schools and fitness clubs are included but these only make up a minuscule proportion of the total sample. Therefore, one has to be careful applying the inferences to the latter two.

6.1 The effects of website appeal

The main hypotheses related to the proposed effects of website appeal have not been accepted. Whereas, it has to be noted that initial analysis accepted hypothesis 2a, but this result is highly questioned because the robustness tests show an insignificant effect. However, one significant finding has been done when only using the direct beneficiaries i.e. those who are expected to have a moderate amount of influence in the purchasing process. This group (n=49) consists of teachers, deans, board members of sub-committees, and physiotherapists. As discussed in 5.3.7, appeal has in such a case a significant effect on perceived usefulness. Moreover, the results show emotional appeal is preferable — in contrary to the logic discussed concerning hypothesis 2a. This may be explained by recapping Lin et al. (2014). In this article Lin et al. show that product type is of paramount importance because it moderates the relationship between advertising appeal and advertising effect (which is a combination

of factors amongst which is purchase intention). Given that the product can be considered as radical, emotional appeal would (retrospectively) be logical to generate a positive effect. Particularly because it requires a novel way of thinking which is likely more easily facilitated by emphasising the more abstract values that are derived from the consumption or possession of a product. The derivation of the more abstract values is most similar to the characteristics of emotional appeal. Durgee et al. (2016) specifically advises to include designers' beliefs, feelings, or intentions for radical innovations — most importantly, because it helps individuals to contextualise and understand novel ideas. On a side note, this could provide some evidence that product type is more important than market characteristics. The observed importance of emotional appeal for the direct beneficiaries in conjunction with the observed importance of utilitarian would support the notion of Lim and Ang (2008) and Klein and Melnyk (2014). They note that a moderate mismatch would improve the effectiveness for utilitarian products. In addition, the results show that a mixed appeal is the least favourable. This may be explained by the fact that mixed appeal did not try to proclaim any direction — possibly causing a lack of confidence for mixed appeal. Moreover, the most prominent emotional and rational elements were removed.

Besides these findings website appeal does not seem to add anything to the predictability, and possibly even worsens it. This notion is strengthened by the fact that multiple wald-tests show that the addition of website appeal to the model does not improve model fit. Also not in case of the moderate influencing group (i.e. the direct beneficiaries). As a consequence previous findings have to be taken in perspective. Thus the notion that website appeal influences one's perceived usefulness or attitude towards the website is not supported. This is not to say that in practice there would be no effect but more that no difference has been observed. Four reasons have been found that might explain why website appeal does not cause a significant effect.

First, more extreme differences between the appeals may be required for example by using more technological features such as an infinity scroll. Requiring more extremes to actually notice the differences would seem logical from a respondents point of view. Logical because an average individual has visited hundreds of websites. Causing each website to compete for one's attention. Take for example Du Plessis (2005), in his book he argues that the more advertisements one sees, the lower the impact of said advertisement. Making it more important that the advertisements are memorable. Whereas, Cotlier (2001) argues that the initial time someone spends on a website decreases as expectations of websites become more fine-tuned. Consequently, Everard and Galletta (2005) add that as a result of the findings from Cotlier it will even be harder to retain the attention of potential customers as they visit more different websites. Meaning more (distinguished) cues could be necessary in order to effectively generate a difference in perceived usefulness and attitude towards the website. Therefore, providing an emotional appeal to the moderate influencing group could explain why it has a significant effect on perceived usefulness. More specifically, because Lynch and de Chernatony (2004) argue that an emotional appeal may used as a way for an organisation to develop a sustainable differential advantage and thus enhance the potential of value creation i.e. to stand out from the crowd.

Second, a website might require different elements to distinguish the appeals — instead of keeping element types comparable. Similar elements have been used to keep usability of the website as constant as possible. Usability might be one of the larger influencers and when constant, appeal may be insufficient to cause a difference. Also the fact that all websites missed a navigation panel could be a factor, as Fang and Holsapple (2007) have shown it

affects usability.

Third, retaining one's attention on a website is different from maintaining it during the survey. Moreover, an individuals cognitive and affective attitude may change when filling in a survey. This may impede true measurement of the effects — which may be more true for those who take longer to fill in the survey. Particularly, because a respondent must then rely on memory.

A fourth reason why website appeal might be non-significant is because involvement has not been controlled. More specifically, since Petty et al. (1983) argue that low and high involved individuals require a different type of persuasion. Whereas a high involved individual is more likely to be persuaded using rational (product relevant) information, a low involved individual is more likely to focus on credibility, attractiveness or prestige of the endorser. Involvement is here defined as the degree one is concerned with forming a reasoned opinion about the product, and the product itself has some direct personal relevance or consequence. Petty et al. uses the elaboration likelihood model to explain this behaviour which involves the two routes one may take for attitudinal change. The first route, called the central route, is the result of diligent consideration. Whilst the second route to persuasion, the peripheral route, involves the use of (external) cues (or signals). The choice of which route is taken determines what argument (and thus appeal) is most effective. Thus the level of involvement of the individual during message processing is critical because it determines (amongst others) which route is taken (Petty et al., 2005). During this research involvement has not been controlled. It might, therefore, be the case that for each appeal high and low involvement observations have been made. Leading to the overall unobservable effect of website appeal. In addition, Dens and De Pelsmacker (2010) show that high involvement situations are ideal for using an informational appeal, whilst low-involvement situations are best suited for an emotional appeal. Interestingly Dens and De Pelsmacker find that this effect is higher when promoting new brands compared to brand extensions. In addition, the elaboration likelihood model could provide an explanation why website appeal influences perceived usefulness for the more direct beneficiaries. These individuals may be characterised as low involved because the personal relevance and/or consequences are not yet known — particularly because the product requires a new way of thinking. That would cause them to choose the peripheral route for attitudinal change. Therefore, focussing on the simpler cues available, such as attractiveness, celebrity endorsement, and personal feelings (Dens and De Pelsmacker, 2010). This could provide an explanation as to why for this sub-group appeal is significant — and in particular why emotional appeal is best. In contrary, appeal is not significant for the indirect beneficiaries — which may be because involvement is mixed. Depending on the target audience, one may conclude that a website should contain elements for both routes to persuasion. In particular because one may never control which route to persuasion is taken. This should, however, not result in an overly dense information quantity because that negatively affects the navigability of a website. In turn affecting attitude towards the website (amongst others) negatively (Kang and Kim, 2006).

6.2 The effects of product attitude

Product attitude consists of two components, utilitarian and hedonic. Previous examination showed that products primarily characterised as hedonic offer the user more experiential consumption, fun, pleasure, and excitement, whilst utilitarian ones are characterised as primar-

ily instrumental and functional (Dhar and Wertenbroch, 2000; Khan et al., 2005). Results, firstly, show neither hedonic nor utilitarian significantly moderate the relationship from website appeal to perceived usefulness and attitude towards the website. Secondly, the results do indicate a seemingly large significant influence of utilitarian at the expense of hedonic. Batra and Ahtola (1991) indicated that such a difference may occur and can be interpreted to suggest the appropriate promotional strategy for the focal firm. Moreover, Batra and Ahtola argue consumer behaviour may be better predicted by attitudes if only the appropriate attitudinal sub-dimension is used, rather than both. Therefore, inferring that behaviour of the sample is best predicted using only the utilitarian component of product attitude (which is supported by the fact that the models using only utilitarian have a somewhat better goodness of fit). Suggesting that focal firm should focus on improving the instrumental and functional evaluation of the product. Especially, because utilitarian (direct and indirect) positively influences purchase probability and net promoter score. However, these results have to be read with caution because these observations were only made by using a website. The apparent importance of utilitarian could therefore also be a product of a website that inadequately represents hedonic aspects of the product. This seems unlikely because the mean score of hedonic is higher than utilitarian. Whereas, a more definitive answer could only be given when consulting those who have seen and/or used the product in practice. Even though only a small amount of valid respondents (n=38) has seen the product in practice, it does show the same pattern. Thus with caution it can be concluded that for focal product, utilitarian is of utmost importance and should be a primary concern in the promotional strategy of the product. In addition, the apparent importance of utilitarian coincides with the general preference of utilitarian products in the B2B market (Brown et al., 2007).

Third, the results show that utilitarian positively influences perceived usefulness. This seems logical because the respondents haven't seen the product before[1] and have to determine how one would categorise the product using semantic differential response items (e.g. effective/ineffective; dull/exciting). When someone subsequently thoughtfully would indicate that he or she thinks the product is, for example, very effective and helpful than it could be reasonable to assume that perceived usefulness is also high. Even though it doesn't always have to be the case.

Finally, utilitarian also has a significantly positive influence on attitude towards the website. Retrospectively this seems logical because if one sees more practical use in a product by indicating a higher utilitarian product attitude, the website must have done its thing in convincing the individual. In particular because the website was for the respondents the first contact with the product. Therefore, one might reward the website with a higher more positive attitude towards it.

6.3 The effects of perceived usefulness

The results support hypothesis 8. Therefore, giving support to the notion that when a product is perceived as more useful an individual will proclaim a higher purchase probability. However, if this eventually will lead to more purchases from organisations remains a question. Most importantly because one's actual purchasing power is unknown and is likely to change continuously. Correspondingly, the notion of Davis (1989) that perceived usefulness increases

[1]Respondents who haven't seen the product before are explicitly stated here as these are less likely to be biased. Therefore, underscoring the importance of the utilitarian component for the focal firm.

adoption can only be indirectly supported. Indirectly because earlier research determined purchase probability has a moderate level of correlation with actual adoption behaviour (McDonald and Alpert, 2001). Where its predicted even less so for new products than for existing one's (Kalwani and Silk, 1982). Support for hypothesis 8 is lost when regressing the data using only respondents from the physical education market category. Multiple reasons could explain the lack of support within the physical education market category. One is that there simply were insufficient respondents possibly causing statistical assumption violations and insufficient power. Another could be that because physical education is different from organisations and clubs in such a way that the notion of buying and/or promoting a product is more complex. This notion is partially supported by a cluster analysis (Figure 5.5), which shows physical education is the most distinct market. The lack of support could also be explained by the fact that the focal firm had the least amount of available resources for physical education.

In addition perceived usefulness has a significant positive influence on net promoter score. Therefore, causing the acceptance of hypothesis 10. Linking this insight to the findings of Raassens and Haans (2017) allows to draw the inference that when an individual perceives the product as more useful she or he will be more likely to use electronic word of mouth. More specifically, use more positive wordings when promoting the product via social media. This could also mean that an individual is more likely to promote it within a firm using social media. Potentially causing an increased adoption likelihood, or at least increased attention. However, the hypothesis is failed to be accepted when only those active in physical education are used in the regression. Failing to accept may be due to multiple reasons, similar to those discussed previously. A likely reason could be the increased complexity of the buying process.

6.4 The effects of attitude towards the website

Attitude towards the website is a widely used effectiveness measure for websites (McMillan et al., 2003). In particular, as it is defined as one's (long lasting) continuous reactive orientation learned from a certain website (Lin, 2011). Earlier research determined attitude is able to influence purchase intention (Bruner and Kumar, 2000). This notion is not supported by this research, because hypothesis 7 — which proposes that attitude towards the website positively influences purchase probability — cannot be accepted. The difference might be caused by the choice of measurement scale. For their research Bruner and Kumar (2000) used the purchase intention scale of MacKenzie et al. (1986) whilst this research uses the purchase probability scale of Juster (1966). Even though older, the purchase probability scale continuously outperforms purchase intention scales (Bruner and Kumar, 2000). Attitude towards a website might therefore be inadequately suited to predict increases in purchase probability. Whilst more suitable for predicting increases in purchase intention.

The reason attitude towards the website doesn't have an effect on purchase probability while perceived usefulness does may be logical. This because it might be that attitude towards the website is unable to distinguish product embedded features from website inadequacies. More specifically, a respondent may not receive sufficient information of a product on the website but is not able to distinguish this lack as a general website lacking information about the product. For example, the website might inadequately convince the user that the product is easy to use. When consequently the respondent is asked about liking a website or how good it is, the respondent might not think that the website inadequately portrayed the products'

ease of use. The respondent could therefore not translate that lack of information to a lower attitude. This sense of inadequacy cannot be reasoned with rationally because for the respondent it is the first contact that is made with the product. Therefore, it might be thought of as a general feature of the product instead of a lack in website quality. For this example, van der Heijden (2003) provides a possible reason why perceived usefulness, in comparison to attitude towards the website, does influence purchase probability. His research is one of many who investigate the technology acceptance model (Marangunić and Granić, 2015). In the centre of this model are perceived usefulness and ease of use. van der Heijden (2003) was one of many who showed ease of use has an influence on one's usefulness perception. Thus the attitude towards the website measure, may not adequately take embedded product features into account when trying to explain website related effectiveness. Which may be why attitude towards the website doesn't have an effect on purchase probability.

This research did find that attitude towards the website has a significantly positive relationship with net promoter score (H9). A reason that net promoter score is significant and purchase probability is not, may lie in the very foundations of both constructs. Whereas purchase probability tries to make one think about use for itself, tries net promoter score to make one think about more general likeable traits that could fit someone (a less tangible entity). As this would be more vague, one might easier proclaim a higher tendency towards promoting a product. Or one might think to promote it only to the more clever individuals, if the respondent would perceive it as too difficult for instance.

There are three instances in which hypothesis 9 becomes insignificant. First when only looking at those respondents that used the browser 'Edge' (twenty-five individuals). This might be explained by the fact that only after looking at the data, it was learned that there was a browser called Edge. Another explanation could be that because it comes standard with the newest Windows version, these respondents are somewhat more complacent towards innovation (i.e. being less critical) even though they want to innovate. Second and third, when looking at individuals in the organisational cluster (physiotherapy, fitness and football schools) and physical education cluster separately. One reason these become insignificant could be that SmartGoals has the least amount of resources available for both of these clusters (with the exception of football schools). Another could be that both are driven by distinctively different processes. However, a limiting factor has to be noted, which is that navigation panels were disabled due to technical difficulties. This may have influenced attitude towards the website negatively (Kang and Kim, 2006).

6.5 Direct and indirect effects

Analysis shows that website appeal doesn't have a (in)direct effect on purchase probability and net promoter score. Meaning that the distinct appeals provided to the sample do not significantly cause different effects on either purchase probability or net promoter score. The reasons follow in general the same line of reasoning as in 6.1. A reason this effect is not seen in either one of the variables could be because the websites were not distinctive enough. Another could be because website appeal does not directly influence purchase probability or net promoter score. Either way, utilitarian does show it influences both variables. The positive effect of utilitarian on purchase probability is in line with the finding of Voss et al. (2003). They show that the hedonic and utilitarian components of product attitude have a significant and direct influence on purchase intention. The main difference with this research

being that here only utilitarian has a significant effect[2]. The insignificance of hedonic is in line with the notion of Batra and Ahtola (1991), who states (as discussed previously in 6.2) that such a difference can occur. Moreover, the results indicate that product attitude should be placed differently in the model. Its effects are not mediated but directly affect purchase probability and net promoter score. Although, a significant indirect effect — via perceived usefulness and attitude towards the website — is also present. These results indicate that the more utilitarian one thinks the product is, the more likely it is that someone indicates a higher purchase probability and net promoter score. Causing a higher level of interest on the individual level. However, since the focal product is sold to organisations it is unknown if this would lead to an actual increased amount of purchases. In particular because adding the retrieved job related information into the models or separating them, does not change the direct effects. On the other hand because no research has been found that reviews the effectiveness of these measures in organisations. However, the organisational interest can still be expected to increase when one's utilitarian attitude increases given the effects seen during this research.

Retrospectively, the effects of utilitarian on the net promoter score and purchase probability are in line with what one might expect when utilitarian is of primary importance for a product. In particular because a higher utilitarian attitude could indicate a better fit of the presumed product characteristics based on the earlier discussed results (That the product is most adequately suited with an utilitarian product attitude). Additionally, the utilitarian importance coincides with the primary reasons why SmartGoals often is adopted[3]. The apparent importance of utilitarian does also converge with the general knowledge of the B2B market which is generally more driven towards the utilitarian. Generally, because value is easier and more effectively generated using utilitarian products or services (Brown et al., 2007). Therefore, the general preference of the sample to indicate a higher propensity to buy when the product is perceived to have higher utilitarian characteristics, might indicate appropriate sampling. Whereas, it also could be an indication that the product is best to be promoted by aiming to increase one's utilitarian attitude towards the product.

6.6 Model adjustment

The discussed results indicate that the conceptual model (Figure 1.2) is not an accurate depiction. First because in general website appeal is not observed to have an effect. Even though for a subset of the entire sample an effect is observed. Possibly indicating website appeal could have an effect, which is not supported by the wald-tests that have been done. As a consequence website appeal is left out of the model. This is not to say that in practice there is no effect. Just not observed. Secondly, utilitarian does have a direct and indirect effect on net promoter score and purchase probability. The insignificance of hedonic does not mean that hedonic should be left out of the model. In particular because Batra and Ahtola (1991) notes that the importance of the product attitude components depends on the product. Thus suggesting that in general both have to be included but that for this research only utilitarian may be the best option. Moreover, hedonic does have a significant effect on

[2]Hedonic alone also has a significant (in)direct effect on purchase probability and net promoter score. But because the main analyses show that hedonic when combined with utilitarian is not significant it has been left out from further discussion. For a more in depth discussion see 5.2.2.

[3]This conclusion is made from informal conversations with the executives

the net promoter score. Therefore, both utilitarian and hedonic will remain in the model. In order to determine if the addition of a direct effect (from utilitarian towards purchase probability and net promoter score) would statistically improve the model fit for the data, an anova analysis has been done between the SEM models with and without this direct effect. These results show that adding a direct effect from utilitarian and hedonic to net promoter score and purchase probability is a significant improvement (p-value<0.0005). Taking these observations together would suggest that the conceptual model depicted in figure 6.1 is more accurate. Caution has, however, to be taken interpreting these results because the model fit compared to the six factor CFA (Table 5.15 model four) is not much better. Thus the statistical support for this model is not irrefutable.

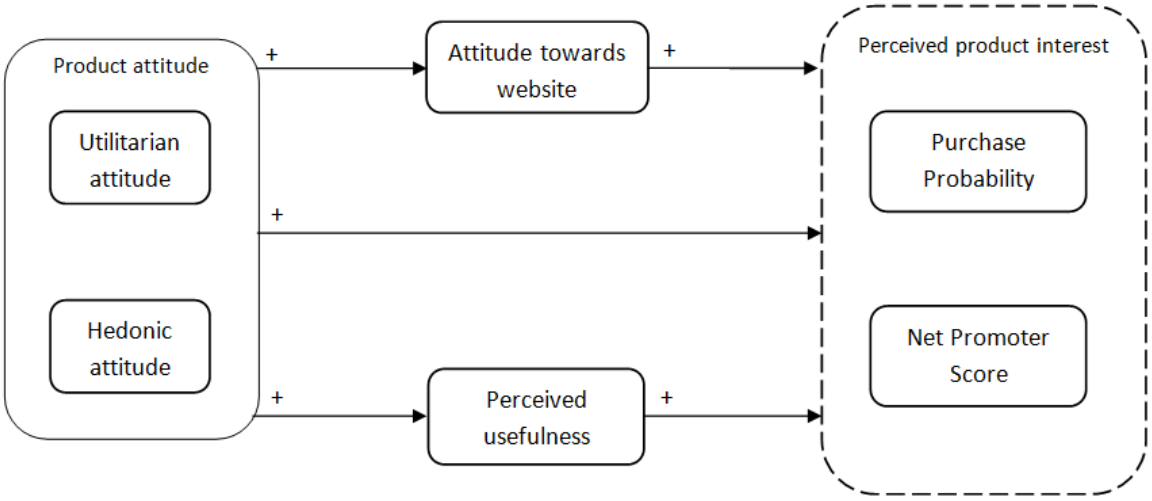


Figure 6.1: Adjusted conceptual model

The adjusted conceptual model is theoretically justifiable through a series of additional justifications discussed here. Do note that here the observations made are left out of the discussion but should not be forgotten. This is done to enforce a purely theoretical discussion. First the direct effect of the utilitarian and hedonic components of product attitude on purchase probability has previously been shown to exist by Voss et al. (2003). This would also seem logical because if someone's attitude towards a product improves, it would imply that the individual sees the product more positively — which may be displayed through an increased propensity to purchase. Second, such effects would also be measurable using net promoter score. More specifically because one's interest is likely to rise when one's attitude towards the product (or interest in the product) increases. Whereas, net promoter score can be seen as a more general measure of interest because it is not necessarily related to using it for oneself and does not imply spending money. Third, the higher one's utilitarian and/or hedonic attitude towards the product is, the more likely it is that someone's attitude towards the website will increase as well. Especially, when the website is one of the first touch-points for someone with the product or brand because than the website must have done its thing in convincing the individual. Finally, a higher product attitude can be expected to increase one's perceived usefulness because in order to believe a product is useful, one would need a positive attitude towards the product both hedonically and utilitarian. In practice, however, it is likely that both mutually influence each other — as the data also would suggest.

Moreover, the data shows utilitarian attitude mediates the effect of perceived usefulness to purchase probability. However, in order to keep this research and the adjusted conceptual model comprehensible it has been left out. Whereas perceived usefulness is not proposed to be an antecedent of product attitude because literature regarding the technology acceptance model reached a consensus regarding the centrality of perceived usefulness in explaining adoption Marangunić and Granić (2015). In related models there are various antecedents for perceived usefulness. As a consequence it seemed better to use product attitude as an antecedent for perceived usefulness. Additionally, attitude towards the website might theoretically also be an antecedent of, or influence, product attitude. This is not depicted in the model because a SEM analysis using this, decreased the goodness of fit quite radically.

Chapter 7

Implications, limitations and future research

The purpose of this study was to determine the effect of website appeal. This is done by using an experimental set-up. In order to get a full apprehension of the meaning of these findings observed by this research, it is important to know details about the respondents. This research gathered two-hundred-six respondents from the sport market using an experimental set-up to determine the effects of website appeal on one's perceived product interest. As the cooperating firm sells to sports organisations, individuals active in such companies have been contacted. Seventy-six respondents (Sixty-one percent of the total amount of respondents from whom the job is known) are labelled as high influencer in purchasing and are expected to only benefit indirectly. The other other respondents from whom the job is known can be characterised as direct beneficiary with a moderate amount of influence in organisational purchasing. From the observations made through these respondents multiple theoretical implications can be drawn (7.1). In order to make use of the theoretical implications, these are translated to what it would imply for managers (7.2). Furthermore, these implications can be used to suggest future research possibilities. Finally, no research is without limitations. Each of which is important to note (7.3).

7.1 Theoretical implications

This research does not provide sufficient evidence to support the notion that website appeal influences perceived usefulness and attitude towards the website. Even though for a subset of the sample evidence has been found that website appeal does influence perceived usefulness. In general this shows that website appeal is able to influence but might require more extreme differences. This notion is somewhat supported by the fact that mixed appeal performed poorest which did not excel in emotional nor in rational argumentation. In addition, the results show that the utilitarian and hedonic components of product attitude also do not moderate the relationship of website appeal towards perceived usefulness or attitude towards the website.

The notion is supported here that perceived usefulness and attitude towards the website positively influence net promoter score. Comparing both effects shows that perceived usefulness is more important. This supports the general notion discussed by the technology acceptance model, which show that perceived usefulness plays a key role in predicting adop-

tion (Marangunić and Granić, 2015). This notion is additionally strengthened by showing that perceived usefulness positively influences purchase probability. Whereas, attitude towards the website does not influence purchase probability. The importance of these findings for the B2B market is strengthened by the fact that more than half of the respondents (from whom the job is known) can be designated to have a high influence in the buying process.

Utilitarian, a component of product attitude, is observed to have a significant influence on perceived usefulness and attitude towards the website at the expense of hedonic. These effects are subsequently observable to influence purchase probability and net promoter score in turn. The effect of utilitarian is, however, not (fully) mediated by perceived usefulness or attitude towards the website because utilitarian also has a direct influence on purchase probability and net promoter score. The direct effect of utilitarian on purchase probability provides support to the notion of Voss et al. (2003). They observed a significant effect on purchase probability from both the hedonic and utilitarian components of product attitude. Given the importance of utilitarian, the notion of Batra and Ahtola (1991) is supported. They state that it might be the case that only one component of product attitude is important. In addition, this research does not provide evidence that attitude towards the website influences purchase probability. This in contrary to the finding of Bruner and Kumar (2000), who determined that attitude does have an influence on purchase intention. The difference may be because Bruner and Kumar used purchase intention, whilst this research used the purchase probability measure.

7.2 Managerial implications

Executives should focus on increasing one's attitude towards the product. More specifically, one or both components of product attitude. These components are labelled as hedonic and utilitarian. Products characterised as hedonic offer the user more experiential consumption, fun, pleasure, and excitement, whilst utilitarian ones are characterised as primarily instrumental and functional (Dhar and Wertenbroch, 2000; Khan et al., 2005). The promotional focus should depend on a products primary focus. For the product used in this research, this would be utilitarian. Executives should focus on one or both components of product attitude in their promotional strategy because it is likely to increase the odds an innovation is adopted (by an organisation) when it increases. This recommendation is made based on several major findings. First and foremost, utilitarian has been found to significantly influence purchase probability and net promoter score. A higher utilitarian score would manifest in one seeing the product to provide more instrumental and functional use. An increase would therefore thus mean that the individual is more likely to purchase the product and promote the product to others. Second, utilitarian has an effect on perceived usefulness and attitude towards the website. Both of which also increase the adoption likelihood. Given the sample, both are also likely to manifest in an organisation. The only difference would be that organisational adoption is more complex, causing the inability of this research to predict adoption. Only increases in chance, as it is dependent upon more variables.

Unfortunately, this research does not provide a means to give a definitive answer as to which website appeal would be most suited to maximise organisational adoption of an innovation. Having said that, it does provide evidence that an emotional appeal is best for the direct beneficiaries (teachers, deans, board members of sub-committees, and physiotherapists) — which is likely influenced by the fact that focal product type is radical. Thus, showing the influence website appeal might have is complex and difficult to observe. As discussed

in 6.1, the inference that could be drawn from this is that simpler more emotional cues are recommended. Especially, as it is likely that indirect beneficiaries (who are likely to have more purchasing power) know less about the context and are therefore expected to require even simpler cues to get an understanding of the product. Providing an understanding should be the primary objective of the website when trying to sell a product. This is not to say that only emotional cues are recommended. The addition of multiple rational cues could also be beneficial because different individuals take different routes to persuasion (See discussion in 6.1). If a website does not facilitate one or both routes to persuasion it may be expected that a certain amount of respondents will leave the website soon unpersuaded and disengaged with the brand. This line of reasoning is strengthened by the fact that mixed appeal shows to be the least favourable. In particular because mixed appeal has been designed as such to be more neutral and provide less direction. In turn this may impede persuasion because none of the routes to persuasion are facilitated. Moreover, it does not provide the confidence required. Furthermore, one must recognise that the website should provide a means to show the usefulness of a product. Particularly, because perceived usefulness is key in the adoption process and positively influences purchase probability and net promoter score. Also, one's attitude towards the website is important because it influences net promoter score. However, this research has not shown that attitude towards the website influences purchase probability.

7.3 Limitations and future research

A major appeal related limitation for this research has been the ability and resources to adequately create more extreme differences between the emotional and rational websites. Also one would be recommended to remain some form of navigation pane on the website because leaving this out is likely to obstruct the flow. This is seen as a limiting factor in this research, as multiple individuals made some annoyed comments. Whereas, in addition future researchers interested in this subject should look into possibilities to personalise the questionnaire as such that it feels the same as the website. This would allow respondents to be better able to answer questions regarding their cognitive and affective attitude — as one does not have to try and remember how it was. In addition, the general decision has been made that after five seconds a subject lands on the website, it is made clear where to click in order to continue to the survey. For this purpose a button appears in the upper right corner. This has been done (instead of only putting it at the end of the website) because pretests indicated it was too hard to find how to continue to the survey or it might be forgotten. However, this might as a possible side-effect draw the subjects to the survey too soon. Furthermore, it should also be noted that when investigating B2B adoption related questions, it might be useful to question the respondents about their function and influence in the purchasing process. Because this had not been done, only for 125 respondents this information has been attained. Whereas the actual influence in this research has been based on job description available on a corporate website, which might not adequately represent purchasing power.

Furthermore, this research would suggest that for a website it is important to take product embedded features and visitor characteristics into account. Most importantly because an appeal has a significant influence on perceived usefulness for those who directly benefit from a product, whilst no effect has been found for the indirect beneficiaries. In general these indirect beneficiaries may have more difficulty in retrieving meaning. Especially, because this research involved a somewhat radical product — causing the potential need for simpler cues to

rise. This could lead to the implication for radical products that the required new knowledge should be reflected by cue simplicity. In particular because radical products are likely to first require a more abstract understanding before going into depth. However, research would be necessary to provide evidence whether this is true. More specifically to understand whether one's distance to use and product radicalness in a B2B setting predict the required cue simplicity and appeal that would be necessary to optimise website effectiveness.

Future research is recommended to study whether it is true that, depending the target audience, websites should always contain elements for both routes to persuasion. In addition, future research is recommended to investigate whether the effect a website appeal has is affected by the distinctiveness of a website compared to other websites. As, for example, it may be that a certain appeal would be more effective after one visits a mundane website compared to a highly persuasive one. Furthermore, one could investigate what the role of technological and visual cues are in facilitating the effects of an appeal. And whether or not it facilitates (or impedes) hedonic or utilitarian product attitude.

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Appendix A

Cause effect diagram

In order to be able to adequately help SmartGoals a cause and effect diagram (Figure A.1) has been made. This has been based on informal conversations with (potential) customers, an important distributor and the company executives. Moreover, the executives verified the diagram. Note that this is a simplified version of the actual cause and effect.

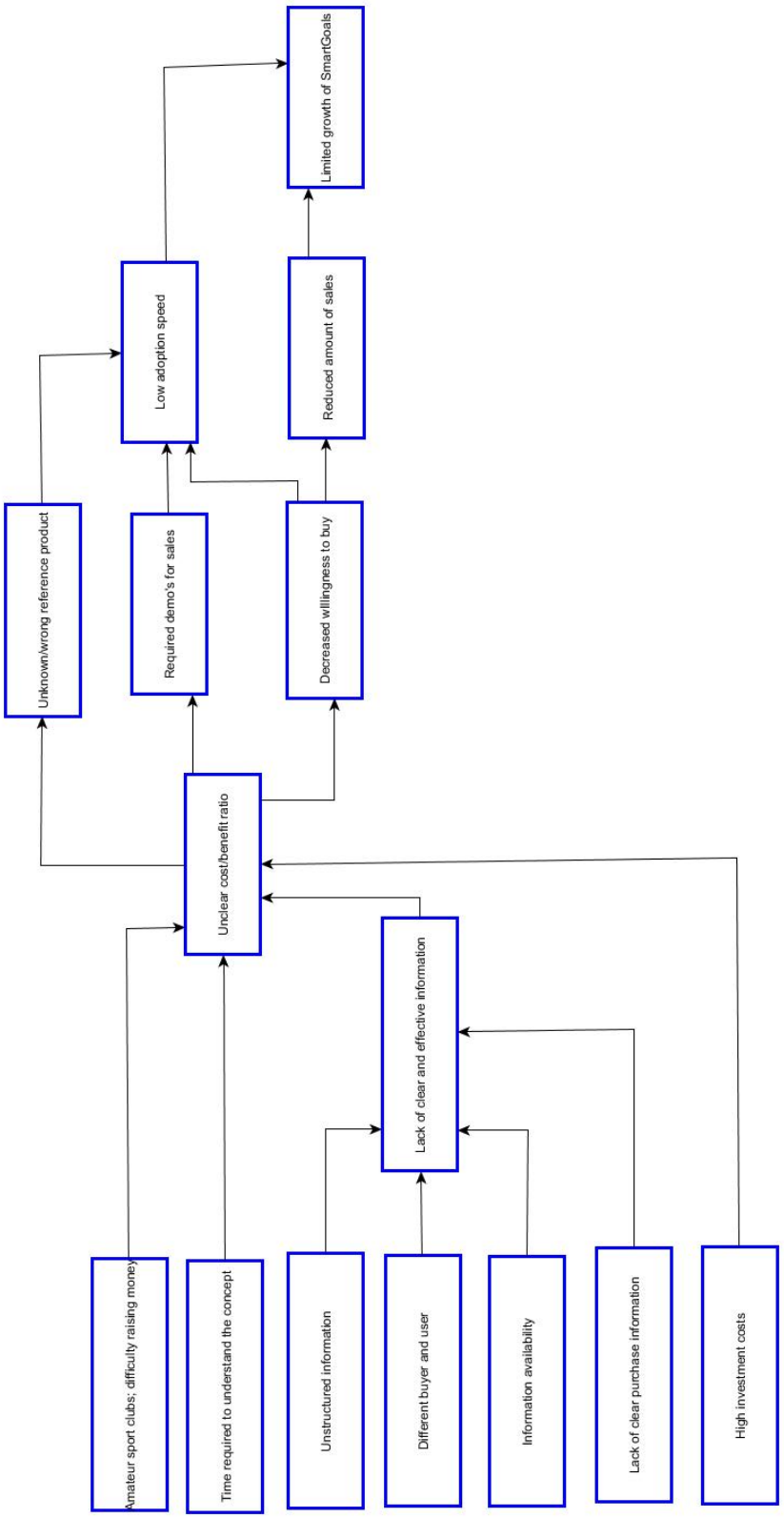


Figure A.1: Cause effect diagram of the management problem

Appendix B

Links to the websites

Table B.1: Links to all websites used in the experimentation process

Sport	Appeal	Link
Football	Emotional	smartgoalstraining.com/survey/football2e
	Mixed	smartgoalstraining.com/survey/football2m
	Rational	smartgoalstraining.com/survey/football2r
Hockey	Emotional	smartgoalstraining.com/survey/hockey2e
	Mixed	smartgoalstraining.com/survey/hockey2m
	Rational	smartgoalstraining.com/survey/hockey2r
Fitness	Emotional	smartgoalstraining.com/survey/fitness2e
	Mixed	smartgoalstraining.com/survey/fitness2m
	Rational	smartgoalstraining.com/survey/fitness2r
Physiotherapy	Emotional	smartgoalstraining.com/survey/fysio2e
	Mixed	smartgoalstraining.com/survey/fysio2m
	Rational	smartgoalstraining.com/survey/fysio2r
Physical Education	Emotional	smartgoalstraining.com/survey/pe2e
	Mixed	smartgoalstraining.com/survey/pe2m
	Rational	smartgoalstraining.com/survey/pe2r
Football schools	Emotional	smartgoalstraining.com/survey/footballs2e
	Mixed	smartgoalstraining.com/survey/footballs2m
	Rational	smartgoalstraining.com/survey/footballs2r

Appendix C

Questionnaire

This appendix contains the original and translated survey questions. Do note that these might differ somewhat per market. One of the originals can be found by clicking here

Table C.1: Original survey questions English

Construct	{Question}	{Scale}	Reference
Net Promoter Score	1. How likely is it that you would recommend SmartGoals to a friend or colleague? (2x)	0-10	Reichheld (2003)
Purchase Probability	2. Taking everything into account, how likely is it that some member of your organisation will buy a set of SmartGoals for the organisation?	Scale with a verbal (e.g., "almost sure"), numerical (e.g., "9") , and probability description (e.g., "9 in 10")	Juster (1966) and Brennan (2004)
	3. What is the chance that you or another member of of your organisation will buy a set of SmartGoals?		
Attitude towards the website	4. I liked the web site	Agree/disagree (Likert) (Bruner used 5 point and Boostrom 7)	Bruner and Kumar (2000) and Boostrom et al. (2013)
	5. I think it is a good web site	Agree/disagree (Likert)	
	6. I think SmartGoals has a nice web site	Agree/disagree (Likert)	
Usefulness	7. Using SmartGoals would enable me to set-up a training or exercise more quickly	Extremely likely/Extremely unlikely (7 point)	Davis (1989)
	8. Using SmartGoals would improve my job performance in helping clients/players train or do an exercise	Extremely likely/Extremely unlikely (7 point)	
	9. Using SmartGoals would increase my productivity in helping clients/players train or do an exercise	Extremely likely/Extremely unlikely (7 point)	
	10. Using SmartGoals would enhance my effectiveness in setting up a good training or exercise	Extremely likely/Extremely unlikely (7 point)	
	11. Using SmartGoals would make it easier to set-up a training or exercise	Extremely likely/Extremely unlikely (7 point)	
	12. I would find SmartGoals useful in setting up a training or exercise	Extremely likely/Extremely unlikely (7 point)	
Product attitude	13. SmartGoals is: Effective/Ineffective	7 point	Voss et al. (2003)
	14. SmartGoals is: Helpful/unhelpful	7 point	
	15. SmartGoals is: Functional/Not functional	7 point	
	16. SmartGoals is: Necessary/Unnecessary	7 point	
	17. SmartGoals is: Practical/Impractical	7 point	
	18. SmartGoals is: Not fun/Fun	7 point	
	19. SmartGoals is: Dull/Exciting	7 point	
	20. SmartGoals is: Not delightful/Delightful	7 point	
	21. SmartGoals is: Not thrilling/Thrilling	7 point	
	22. SmartGoals is: Enjoyable/Unenjoyable	7 point	
General	23. What message stuck with you the most about the product?	Optional open question	
	24. What do you consider most important about SmartGoals?	Multiple choice	
	25. Have you ever used or seen SmartGoals in practice?	Yes/No	
	26. Comments:	Optional open question	
	27. If you would like to learn about the results of this study, please leave you email address:	Optional open question	
Trap questions	28. Please answer 'Extremely likely'	7 point scale	
	29. SmartGoals is: (Please select me/Don't select me)	7 point scale	

Table C.2: Translated Dutch survey questions

Construct	{Question}	{Scale}	Reference
Net Promoter Score	1. Hoe waarschijnlijk is het dat u SmartGoals aan een vriend(in) of collega (2x) zou aanbevelen? (2x)	0-7	Reichheld (2003) Reichheld (2003)
Purchase Probability	2. Hoe waarschijnlijk is het dat u of een ander lid van de voetbalclub een set SmartGoals zal kopen? 3. Rekeninghoudend met alles, hoe waarschijnlijk is het dat u of een ander lid van de voetbalclub een set SmartGoals zal kopen?	Scale with a verbal (e.g., "almost sure"), numerical (e.g., "9"), probability description (e.g., "9 in 10")	Juster (1966) and Brennan (2004)
4. Attitude towards the website	Ik vind dat SmartGoals een goede website heeft	Agree/disagree (7 point Likert scale)	Bruner and Kumar (2000) and
	5. Ik vind dat SmartGoals een mooie website heeft	Agree/disagree (7 point Likert scale)	Boostrom et al. (2013)
	6. Ik vond de website leuk	Agree/disagree (7 point Likert scale)	
Usefulness	7. Door SmartGoals te gebruiken kan ik sneller een training opzetten Door SmartGoals te gebruiken kan ik sneller een training opzetten	Extremely likely/Extremely unlikely (7 point)	Davis (1989)
	8. Door SmartGoals te gebruiken wordt mijn werkprestatie verbeterd omdat omdat ik de spelers beter kan helpen trainen	Extremely likely/Extremely unlikely (7 point)	
	9. Door SmartGoals te gebruiken wordt mijn productiviteit verhoogd voor voor het helpen met trainen van de spelers	Extremely likely/Extremely unlikely (7 point)	
	10. Door SmartGoals te gebruiken wordt ik effectiever in het opzetten van een goede training	Extremely likely/Extremely unlikely (7 point)	
	11. Door SmartGoals te gebruiken zal het makkelijker worden om een training op te zetten	Extremely likely/Extremely unlikely (7 point)	
	12. Ik zou SmartGoals nuttig vinden om te gebruiken bij het opzetten van een training	Extremely likely/Extremely unlikely (7 point)	
Product attitude	13. SmartGoals is: Plezierig/Onplezierig	7 point	Voss et al. (2003)
	14. SmartGoals is: Noodzakelijk/Onnodig	7 point	
	15. SmartGoals is: Niet leuk/Leuk	7 point	
	16. SmartGoals is: Praktisch/Onpraktisch	7 point	
	17. SmartGoals is: Niet inspirerend/Inspirerend	7 point	
	18. SmartGoals is: Effectief/Ineffectief	7 point	
	19. SmartGoals is: Functioneel/Niet functioneel	7 point	
	20. SmartGoals is: Niet spannend/Spannend	7 point	
	21. SmartGoals is: Nuttig/Niet nuttig	7 point	
	22. SmartGoals is: Saai/Opwindend	7 point	
General	23. Heeft u SmartGoals ooit gebruikt of in het echt gebruikt zien worden?	Yes/No	
	24. Wat verwacht je dat het belangrijkste is voor SmartGoals?	Multiple choice	
	25. Wat is het meest bij u blijven hangen over het product?	Optional open question	
	26. Als je aan het eind van het onderzoek de resultaten wilt weten, vul dan hier uw e-mail adres in	Optional open question	
	27. Vul hier uw email adres in als u kans wilt maken op een SmartGoals clinic	Optional open question	
	28. Heeft u nog opmerkingen?	Optional open question	
Trap questions	29. Door SmartGoals te gebruiken kunnen vissen beter zwemmen. Antwoord alstublieft 'Zeker niet'	7 point scale	
	30. SmartGoals is: Selecteer mij aub/Selecteer mij niet aub	7 point scale	

Note: Various questions could differ because different markets were used

Appendix D

Emails send

Table D.1: Email campaigns send

Year	Send Date	Time	Title	Category	First name (y=1)	Total Recipients	Successful Deliveries	Total Bounces	Unique Opens	Unique open Rate	Total Opens	Unique Clicks	Unique click Rate	Total Clicks	Unsubscribes	Abuse Complaints
2017	6-jun		2017_06_06_TestSurvey SmartGoals_metnamen	Voetbal		763	742	22	37	4,99%	78	7	0,94%	8	16	0
2017	6-jun		2017_06_06_TestSurvey SmartGoals_zondernamen (1)	Voetbal		1178	1132	53	428	37,81%	931	51	4,51%		21	0
2017	19-jun		2017_06_19_SG_survey_zondernamen2	Voetbal	2	1789	1554	231	452	29,09%	794	57	3,67%	68		0
2017	22-jun		2017_06_22_NEW_REMINDER_TestSurvey_metnamen	Voetbal		745	720	9	261	36,25%	549	39	5,42%	53	11	0
2017	22-jun		2017_06_23_REMINDER_TestSurvey SmartGoals_zondernamen	Voetbal		1151	958	166	314	32,78%	616	32	3,34%	36	17	
2017	24-jul		2017_07_25_Fysiotherapie_ZonderNamenOnderzoek	Fysio		540	454	89	98	21,59%	208	19	4,19%	22	7	0
2017	aug-01	8:00 AM	Fitness_metnaam	Fitness	1	69	69	0	26	37.68%	92	2	2.90%	0	2	0
2017	aug-28	8:30 AM	Fitness_metnaam_REMINDER	Fitness	1	67	67	0	25	37.31%	41	2	2.99%	0	3	0
2017	aug-01	8:00 AM	Fitness_ZONDERnaam	Fitness	2	877	868	9	224	25.81%	406	25	2.88%	0	16	0
2017	aug-29	8:30 AM	Fitness_zondernaam_REMINDER	Fitness	2	858	848	10	152	17.92%	249	28	3.30%	0	10	0
	7-sep		Fysio zondernaam REMINDER	Fysio	2	526	506	5	116	22,92%	217	18	3,56%	22	9	
2017	jul-24	8:00 AM	Fysio_MetNaam	Fysio	1	343	338	5	96	28.40%	189	28	8.28%	0	2	0
2017	29-aug		fysio_pre zondernaam	Fysio		42	41	2	11	26,83%	25	5	12,20%	5	0	0
2017	29-aug		fysio_pre_metnaam	Fysio		17	17	0	1	5,88%	2	0	0,00%	0	0	0
2017	jul-17	11:02 AM	Fysio_PreMetNaam	Fysio	1	23	23	0	7	30.43%	10	6	26.09%	0	0	0
2017	jul-17	8:00 AM	Fysio_PreMetNaam	Fysio	1	17	17	0	2	11.76%	9	0	0.00%	0	0	0
2017	aug-28	8:30 AM	Fysio_PreMetNaam	Fysio	1	22	22	0	4	18.18%	6	2	9.09%	2	0	0
2017	jul-17	11:01 AM	Fysio_PreZonderNaam	Fysio	2	26	25	1	11	44.00%	23	4	16.00%	0	0	0
2017	jul-17	8:00 AM	Fysio_PreZonderNaam	Fysio	2	42	42	0	20	47.62%	57	6	14.29%	6	0	0
2017	aug-28	8:30 AM	Fysio_PreZonderNaam	Fysio	2	25	25	0	8	32.00%	14	0	0.00%	0	1	0
2017	29-aug		Hockey_metnaam	Hockey		668	635	32	314	49,45%	714	48	7,56%	59	7	0
2017	jun-26	9:00 AM	Hockey_metnaam	Hockey	1	809	804	5	566	70.40%	1703	192	23.88%	0	12	0
2017	29-aug		hockey_zondernaam	Hockey		129	127	6	73	57,48%	204	11	8,66%	16	1	0
2017	jun-27	9:00 AM	Hockey_ZONDERnaam	Hockey	2	144	144	0	111	77.08%	369	34	23.61%	0	1	0
2017	sep-05	8:15 AM	physicaleducation_metnaam	PE	1	160	156	4	40	25.64%	57	6	3.85%	0	3	0
2017	sep-05	8:15 AM	physicaleducation_pre	PE	2	93	90	3	16	17.78%	40	4	4.44%	0	1	0
2017	sep-05	8:15 AM	physicaleducation_zondernaam1	PE	2	673	662	11	166	25.08%	514	36	5.44%	0	16	0
2017	sep-07	7:15 AM	physicaleducation_zondernaam2	PE	2	593	574	19	172	29.97%	405	35	6.10%	0	11	0
2017	sep-12	7:15 AM	REMINDER PE met naam	PE	1	153	151									
2017	sep-12	7:15 AM	REMINDER PE zondernaam1	PE	2	640	640									
2017	sep-12	7:30 AM	REMINDER PE zondernaam2	PE	2	547	534									
2017	29-aug		revalidatie	Fysio		130	127	3	6	4,72%	73	4	3,15%	6	0	0
2017	jul-24	8:00 AM	revalidatiecentra	Fysio_revalidatie	2	134	131	3	21	16.03%	163	9	6.87%	0	1	0
2017	sep-07	7:15 AM	Voetbal pretest met naam (Time)	Voetbal	1	131	126	5	48	38.10%	101	0	0.00%	0	1	0
2017	29-aug		Voetbal pretest zondernaam	Voetbal		51	30	29	6	20,00%	12	0	0,00%	0	1	0
2017	28-aug	11:30	Voetbal zondernaam 2.1 reminder	Voetbal	2	981	845	136	266	31,48%		41	4,85%		4	1
2017	aug-28	8:30 AM	Voetbal_metnaam	Voetbal	1	654	634	20	278	43.85%	496	44	6.94%	0	8	0
2017	aug-28	8:30 AM	Voetbal_zondernaam1	Voetbal	2	162	153	9	56	36.60%	100	6	3.92%	0	3	0
2017	29-aug		voetbal_zondernaam3	Voetbal		467	309	163	76	24,60%	150	8	2,59%	8	2	0
	7-sep		Voetbal2.2	Voetbal	2	421	395	2	111	28,10%	256	24	6,08%	28	3	
2017	29-aug		voetbalscholen metnaam	Voetbalscholen		90	86	3	38	44,19%	71	12	13,95%	13	1	0
	7-sep		voetbalscholen metnaam_REMINDER	Voetbalscholen	1	86	84	1	39	46,43%	63	5	5,95%	5	2	
2017	29-aug		voetbalscholen_zondernaam	Voetbalscholen		74	68	1	23	33,82%	39	8	11,76%	8	0	0
	7-sep		voetbalscholen_zondernaam_REMINDER	Voetbalscholen	2	73	68	0	20	29,41%	36	4	5,88%	4	0	
2017	jul-25	7:02 AM	Fitness_pre	Fitness	2	48	48	0	10	20.83%	17	0	0.00%	0	1	0

Appendix E

Results website pretest

Table E.1: Results of the English website pretest on utilitarian and hedonic

	Dependent variable:	
	Utilitarian	Hedonic
	(1)	(2)
Emotional appeal	0.720	0.320
	(1.043)	(0.789)
Rational appeal	0.533	−0.467
	(1.099)	(0.832)
Constant	5.200***	5.400***
	(0.952)	(0.720)
Observations	9	9
R^2	0.075	0.272
Adjusted R^2	−0.233	0.029
Residual Std. Error (df = 6)	0.952	0.720
F Statistic (df = 2; 6)	0.243	1.118

Note: *p<0.1; **p<0.05; ***p<0.01

Mixed appeal is used as contrast and consists of only one observation

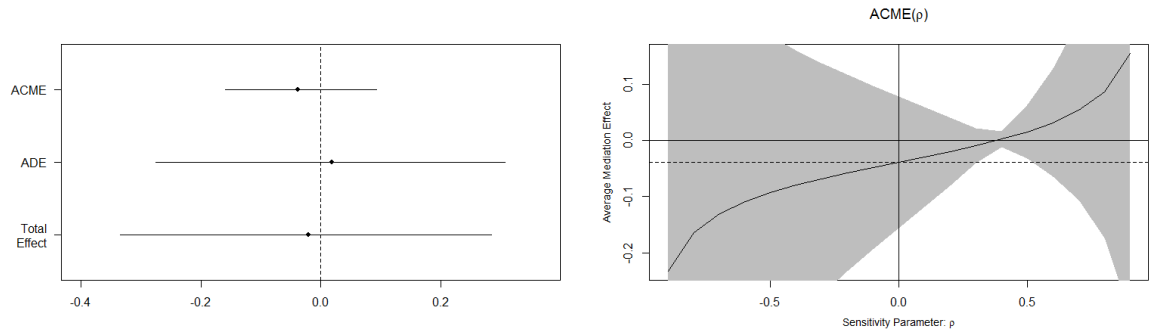
Appendix F

Mediation tables and graphs

F.1 Main mediation results

Table F.1: Causal Mediation Analysis for Appeal (+ UT + HED covariates) ->Usefulness ->NPS

	Estimate 95%	Lower 95% CI	Upper 95% CI	p-value
Contrast 1 and 3				
ACME	-0.0388	-0.1520	0.08	0.53
ADE	0.0179	-0.2490	0.31	0.94
Total Effect	-0.0209	-0.3341	0.28	0.88
Prop. Mediated	1.8566	0.1854	169.08	0.73



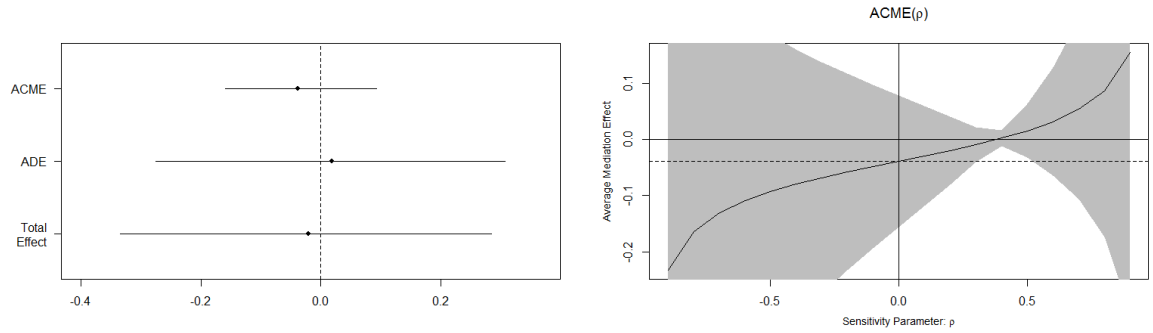
(a) Mediation result graph

(b) Mediation sensitivity analysis ACME

Figure F.1: Causal Mediation Analysis for Appeal (+ UT + HED covariates) ->Usefulness ->NPS

Table F.2: Causal mediation analysis for Appeal (+ UT + HED covariates) -> Attitude-> NPS

	Estimate 95%	Lower 95% CI	Upper 95% CI	p-value
Contrast 1 and 3				
ACME	0.00811	-0.07455	0.08	0.86
ADE	-0.02901	-0.31743	0.27	0.86
Total Effect	-0.02091	-0.29996	0.30	0.89
Prop. Mediated	-0.38782	-27.88956	0.45	0.84



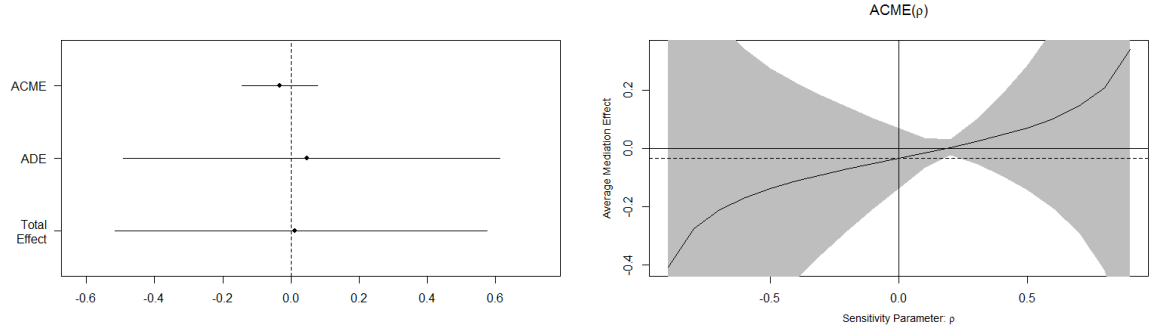
(a) Mediation result graph

(b) Mediation sensitivity analysis ACME

Figure F.2: Causal mediation analysis for Appeal (+ UT + HED covariates) -> Attitude-> NPS

Table F.3: Causal mediation analysis for Appeal (+ UT + HED covariates) ->Usefulness ->PP

	Estimate 95%	Lower 95% CI	Upper 95% CI	p-value
Constrast 1 and 3				
ACME	-0.0335	-0.1433	0.08	0.52
ADE	0.0461	-0.4914	0.61	0.86
Total Effect	0.0126	-0.5157	0.58	0.94
Prop. Mediated	-2.6515	-952.4095	-0.87	0.91



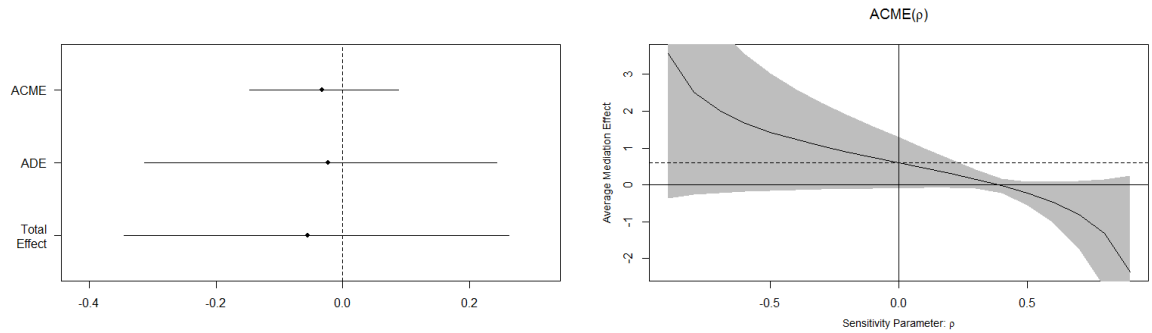
(a) Mediation result graph

(b) Mediation sensitivity analysis ACME

Figure F.3: Causal mediation analysis for Appeal (+ UT + HED covariates) ->Usefulness ->PP

Table F.4: Causal mediation analysis for Appeal (+ UT + HED **interaction** covariates) ->Usefulness ->PP

	Estimate 95%	Lower 95% CI	Upper 95% CI	p-value
Constrast 1 and 3				
ACME	-0.0325	-0.1583	0.09	0.56
ADE	-0.0230	-0.3168	0.25	0.86
Total Effect	-0.0555	-0.3679	0.24	0.71
Prop. Mediated	0.5853	-3.0210	6.32	0.71



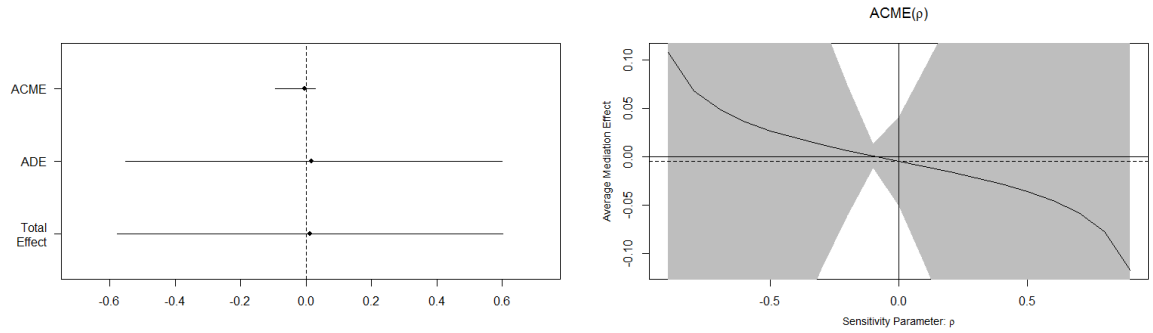
(a) Mediation result graph

(b) Mediation sensitivity analysis ACME

Figure F.4: Causal mediation analysis for Appeal (+ HED + UT **interaction** covariates) ->Usefulness ->PP

Table F.5: Causal mediation analysis for Appeal (+ UT + HED covariates) -> Attitude-> PP

	Estimate 95%	Lower 95% CI	Upper 95% CI	p-value
Constrast 1 and 3				
ACME	-0.0335	-0.1433	0.08	0.52
ADE	0.0461	-0.4914	0.61	0.86
Total Effect	0.0126	-0.5157	0.58	0.94
Prop. Mediated	-2.6515	-952.4095	-0.87	0.91



(a) Mediation result graph

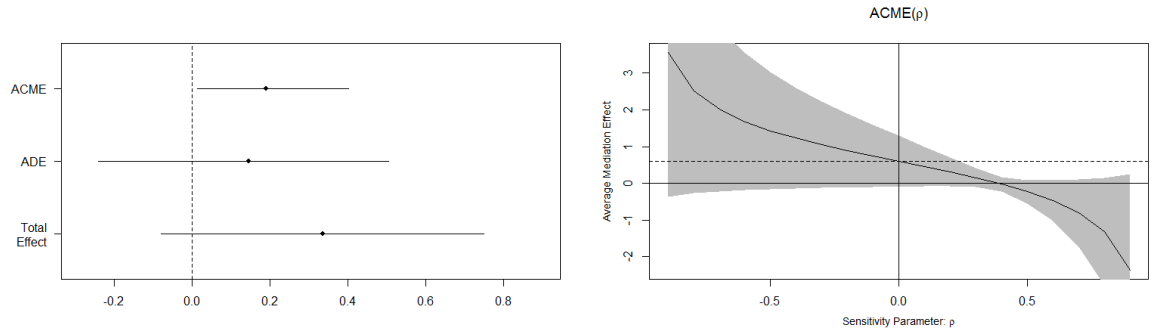
(b) Mediation sensitivity analysis ACME

Figure F.5: Causal mediation analysis for Appeal (+ UT + HED covariates) -> Attitude-> PP

F.2 Mediation using linear mixed models

Table F.6: Causal mediation analysis for LMM Appeal (+ HED covariates) -> Attitude-> NPS

	Estimate 95%	Lower 95% CI	Upper 95% CI	p-value
Constrast 1 and 3				
ACME	0.1903	0.0143	0.40	0.038 *
ADE	0.1453	-0.2396	0.50	0.448
Total Effect	0.3357	-0.0795	0.75	0.114
Prop. Mediated	0.5128	-1.8006	3.44	0.116



(a) Mediation result graph

(b) Mediation sensitivity analysis ACME

Figure F.6: Causal mediation analysis for LMM Appeal (+ UT + HED covariates) -> Attitude-> NPS

Table F.7: Causal mediation analysis for LMM Appeal (+ HED covariates) -> Usefulness-> NPS

	Estimate 95%	Lower 95% CI	Upper 95% CI	p-value
Constrast 1 and 3				
ACME	0.2990	0.0188	0.57	0.038 *
ADE	0.0343	-0.2692	0.33	0.826
Total Effect	0.3333	-0.0802	0.72	0.110
Prop. Mediated	0.8396	-1.6044	3.97	0.120

Appendix G

Robustness checks

G.1 Jobs and influence

Table G.1: Moderate influence

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	0.496**	0.860**	0.460**	0.351	0.715*	0.356		
	(0.222)	(0.354)	(0.221)	(0.337)	(0.417)	(0.343)		
Rational appeal	0.152	0.695**	0.205	0.411	0.845**	0.405		
	(0.205)	(0.325)	(0.207)	(0.311)	(0.383)	(0.320)		
Utilitarian	0.913***		0.877***	0.782***		0.787***		
	(0.098)		(0.100)	(0.148)		(0.155)		
Hedonic		0.219**	0.082		0.114	−0.010		
		(0.095)	(0.060)		(0.111)	(0.093)		
Attitude towards the website							0.350**	0.164
							(0.139)	(0.322)
Perceived usefulness							0.621***	0.541
							(0.152)	(0.353)
Constant	−0.028	3.248***	−0.237	0.907	4.057***	0.932	0.036	0.539
	(0.487)	(0.509)	(0.506)	(0.738)	(0.600)	(0.784)	(0.652)	(1.513)
Observations	49	49	49	49	49	49	49	49
R^2	0.709	0.236	0.721	0.444	0.120	0.444	0.553	0.110
Adjusted R^2	0.689	0.185	0.695	0.407	0.062	0.393	0.534	0.072
Residual Std. Error	0.555	0.899	0.550	0.842	1.059	0.851	0.831	1.926
	(df = 45)	(df = 45)	(df = 44)	(df = 45)	(df = 45)	(df = 44)	(df = 46)	(df = 46)
F Statistic	36.514***	4.630***	28.378***	11.959***	2.050	8.775***	28.468***	2.853*
	(df = 3; 45)	(df = 3; 45)	(df = 4; 44)	(df = 3; 45)	(df = 3; 45)	(df = 4; 44)	(df = 2; 46)	(df = 2; 46)

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.2: Moderate influence

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	−0.441	−1.000	−0.616	1.732	0.577	2.172		
	(1.174)	(1.323)	(1.245)	(1.816)	(1.551)	(1.920)		
Rational appeal	1.290	1.255	1.088	1.915	3.156**	3.081		
	(1.215)	(1.111)	(1.323)	(1.879)	(1.303)	(2.040)		
Utilitarian	0.917***		0.922***	0.964***		0.904***		
	(0.158)		(0.164)	(0.244)		(0.253)		
Emotional appeal:Utilitarian	0.178		−0.014	−0.282		−0.379		
	(0.230)		(0.263)	(0.356)		(0.405)		
Rational appeal:Utilitarian	−0.220		−0.227	−0.307		−0.239		
	(0.240)		(0.245)	(0.372)		(0.378)		
Hedonic		0.182	−0.016		0.374	0.179		
		(0.198)	(0.131)		(0.232)	(0.202)		
Emotional appeal:Hedonic		0.354	0.224		−0.008	−0.004		
		(0.259)	(0.184)		(0.304)	(0.284)		
Rational appeal:Hedonic		−0.137	0.055		−0.523*	−0.335		
		(0.237)	(0.155)		(0.277)	(0.239)		
Attitude towards the website							0.350**	0.164
							(0.139)	(0.322)
Perceived usefulness							0.621***	0.541
							(0.152)	(0.353)
Constant	−0.044	3.420***	0.004	0.050	2.853**	−0.496	0.036	0.539
	(0.759)	(0.950)	(0.859)	(1.173)	(1.114)	(1.324)	(0.652)	(1.513)
Observations	49	49	49	49	49	49	49	49
R^2	0.725	0.321	0.743	0.455	0.226	0.494	0.553	0.110
Adjusted R^2	0.693	0.242	0.692	0.392	0.136	0.392	0.534	0.072
Residual Std. Error	0.551	0.867	0.553	0.853	1.016	0.852	0.831	1.926
	(df = 43)	(df = 43)	(df = 40)	(df = 43)	(df = 43)	(df = 40)	(df = 46)	(df = 46)
F Statistic	22.709***	4.069***	14.477***	7.181***	2.515**	4.873***	28.468***	2.853*
	(df = 5; 43)	(df = 5; 43)	(df = 8; 40)	(df = 5; 43)	(df = 5; 43)	(df = 8; 40)	(df = 2; 46)	(df = 2; 46)

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.3: High influence

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	0.077	−0.237	0.076	−0.581*	−0.764**	−0.580*		
	(0.202)	(0.275)	(0.199)	(0.333)	(0.346)	(0.334)		
Rational appeal	0.092	−0.071	0.054	−0.305	−0.358	−0.285		
	(0.190)	(0.264)	(0.188)	(0.313)	(0.332)	(0.316)		
Utilitarian	0.825***		0.977***	0.652***		0.572***		
	(0.084)		(0.115)	(0.138)		(0.193)		
Hedonic		0.420***	−0.200*		0.468***	0.105		
		(0.106)	(0.105)		(0.134)	(0.177)		
Attitude towards the website							0.252***	0.138
							(0.080)	(0.165)
Perceived usefulness							0.836***	1.147***
							(0.102)	(0.210)
Constant	0.725	2.597***	1.061**	1.868**	2.590***	1.691**	−0.723	−1.933*
	(0.452)	(0.625)	(0.478)	(0.744)	(0.784)	(0.805)	(0.478)	(0.986)
Observations	76	76	76	76	76	76	76	76
R^2	0.585	0.203	0.605	0.306	0.225	0.310	0.619	0.361
Adjusted R^2	0.568	0.170	0.583	0.277	0.192	0.271	0.609	0.344
Residual Std. Error	0.661	0.917	0.650	1.089	1.151	1.094	0.808	1.668
	(df = 72)	(df = 72)	(df = 71)	(df = 72)	(df = 72)	(df = 71)	(df = 73)	(df = 73)
F Statistic	33.844***	6.119***	27.210***	10.593***	6.953***	7.961***	59.412***	20.636***
	(df = 3; 72)	(df = 3; 72)	(df = 4; 71)	(df = 3; 72)	(df = 3; 72)	(df = 4; 71)	(df = 2; 73)	(df = 2; 73)

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.4: High influence

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	−1.410	0.822	−1.031	−0.880	−0.942	−1.548		
	(1.036)	(1.521)	(1.141)	(1.730)	(1.923)	(1.940)		
Rational appeal	−0.460	1.708	0.106	−1.083	0.712	−0.628		
	(0.988)	(1.405)	(1.050)	(1.649)	(1.776)	(1.785)		
Utilitarian	0.696***		0.622**	0.576**		0.410		
	(0.144)		(0.273)	(0.240)		(0.463)		
Emotional appeal:Utilitarian	0.314		0.461	0.056		−0.016		
	(0.213)		(0.330)	(0.356)		(0.562)		
Rational appeal:Utilitarian	0.106		0.438	0.160		0.453		
	(0.199)		(0.328)	(0.332)		(0.558)		
Hedonic		0.616***	0.087		0.542**	0.193		
		(0.199)	(0.271)		(0.251)	(0.461)		
Emotional appeal:Hedonic		−0.190	−0.205		0.042	0.193		
		(0.280)	(0.319)		(0.354)	(0.543)		
Rational appeal:Hedonic		−0.333	−0.417		−0.205	−0.355		
		(0.258)	(0.314)		(0.326)	(0.533)		
Attitude towards the website							0.252***	0.138
							(0.080)	(0.165)
Perceived usefulness							0.836***	1.147***
							(0.102)	(0.210)
Constant	1.382*	1.509	1.279	2.255*	2.178	2.026	−0.723	−1.933*
	(0.747)	(1.124)	(0.803)	(1.246)	(1.422)	(1.366)	(0.478)	(0.986)
Observations	76	76	76	76	76	76	76	76
R^2	0.598	0.222	0.626	0.309	0.232	0.332	0.619	0.361
Adjusted R^2	0.569	0.166	0.581	0.259	0.177	0.252	0.609	0.344
Residual Std. Error	0.661	0.919	0.651	1.102	1.162	1.108	0.808	1.668
	(df = 70)	(df = 70)	(df = 67)	(df = 70)	(df = 70)	(df = 67)	(df = 73)	(df = 73)
F Statistic	20.808***	3.988***	13.997***	6.249***	4.236***	4.163***	59.412***	20.636***
	(df = 5; 70)	(df = 5; 70)	(df = 8; 67)	(df = 5; 70)	(df = 5; 70)	(df = 8; 67)	(df = 2; 73)	(df = 2; 73)

Note: *p<0.1; **p<0.05; ***p<0.01

G.2 Regression results of the test and train datasets

Table G.5: Results train dataset

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	0.144	−0.010	0.148	0.190	0.076	0.178		
	(0.140)	(0.204)	(0.140)	(0.221)	(0.240)	(0.221)		
Rational appeal	0.187	0.404**	0.179	0.197	0.364	0.219		
	(0.131)	(0.192)	(0.132)	(0.207)	(0.225)	(0.208)		
Utilitarian	0.862***		0.876***	0.599***		0.563***		
	(0.059)		(0.064)	(0.093)		(0.102)		
Hedonic		0.269***	−0.029		0.268***	0.076		
		(0.073)	(0.055)		(0.086)	(0.086)		
Attitude towards the website							0.259***	−0.008
							(0.060)	(0.118)
Perceived usefulness							0.790***	0.952***
							(0.069)	(0.125)
Constant	0.382	3.063***	0.461	1.874***	3.342***	1.669***	−0.628*	−0.526
	(0.291)	(0.386)	(0.326)	(0.459)	(0.453)	(0.514)	(0.333)	(0.703)
Observations	165	165	165	165	165	165	165	165
R^2	0.582	0.102	0.582	0.215	0.069	0.218	0.585	0.263
Adjusted R^2	0.574	0.085	0.572	0.200	0.051	0.199	0.580	0.254
Residual Std. Error	0.690	1.011	0.691	1.089	1.186	1.090	0.854	1.685
	(df = 161)	(df = 161)	(df = 160)	(df = 161)	(df = 161)	(df = 160)	(df = 162)	(df = 162)
F Statistic	74.623***	6.063***	55.790***	14.656***	3.957***	11.174***	114.323***	28.972***
	(df = 3; 161)	(df = 3; 161)	(df = 4; 160)	(df = 3; 161)	(df = 3; 161)	(df = 4; 160)	(df = 2; 162)	(df = 2; 162)

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.6: Results test dataset

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	0.165	0.896*	0.132	−0.151	0.466	−0.206		
	(0.305)	(0.483)	(0.307)	(0.425)	(0.525)	(0.426)		
Rational appeal	−0.219	0.219	−0.287	0.083	0.415	−0.031		
	(0.279)	(0.466)	(0.289)	(0.390)	(0.506)	(0.400)		
Utilitarian	0.963***		1.028***	0.795***		0.904***		
	(0.108)		(0.128)	(0.150)		(0.177)		
Hedonic		0.388**	−0.110		0.253	−0.184		
		(0.161)	(0.115)		(0.175)	(0.160)		
Attitude towards the website							0.374**	−0.175
							(0.148)	(0.241)
Perceived usefulness							0.640***	0.843***
							(0.147)	(0.227)
Constant	0.051	2.160**	0.351	0.874	2.969***	1.378	−0.273	0.540
	(0.510)	(0.920)	(0.601)	(0.711)	(1.000)	(0.832)	(0.642)	(0.990)
Observations	41	41	41	41	41	41	41	41
R^2	0.720	0.234	0.727	0.445	0.076	0.465	0.597	0.233
Adjusted R^2	0.697	0.172	0.696	0.400	0.001	0.405	0.576	0.192
Residual Std. Error	0.728	1.204	0.729	1.015	1.309	1.010	1.007	1.867
	(df = 37)	(df = 37)	(df = 36)	(df = 37)	(df = 37)	(df = 36)	(df = 38)	(df = 38)
F Statistic	31.681***	3.764**	23.923***	9.889***	1.018	7.815***	28.162***	5.767***
	(df = 3; 37)	(df = 3; 37)	(df = 4; 36)	(df = 3; 37)	(df = 3; 37)	(df = 4; 36)	(df = 2; 38)	(df = 2; 38)

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.7: Train set results for interaction

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	−1.387*	−1.321	−1.848**	−1.944*	−0.527	−1.783		
	(0.718)	(1.003)	(0.810)	(1.142)	(1.172)	(1.297)		
Rational appeal	0.142	−0.328	−0.582	−0.641	1.476	0.117		
	(0.655)	(0.855)	(0.729)	(1.042)	(0.999)	(1.167)		
Utilitarian	0.770***		0.877***	0.403**		0.286		
	(0.103)		(0.114)	(0.164)		(0.183)		
Emotional appeal:Utilitarian	0.338**		0.247	0.469*		0.500*		
	(0.155)		(0.172)	(0.246)		(0.275)		
Rational appeal:Utilitarian	0.013		−0.123	0.181		0.325		
	(0.136)		(0.148)	(0.216)		(0.237)		
Hedonic		0.134	−0.211**		0.345**	0.232		
		(0.135)	(0.101)		(0.158)	(0.161)		
Emotional appeal:Hedonic		0.266	0.182		0.120	−0.068		
		(0.199)	(0.149)		(0.233)	(0.238)		
Rational appeal:Hedonic		0.151	0.281**		−0.234	−0.295		
		(0.173)	(0.127)		(0.202)	(0.203)		
Attitude towards the website							0.259***	−0.008
							(0.060)	(0.118)
Perceived usefulness							0.790***	0.952***
							(0.069)	(0.125)
Constant	0.805	3.723***	1.342**	2.784***	2.969***	2.192**	−0.628*	−0.526
	(0.487)	(0.675)	(0.547)	(0.775)	(0.788)	(0.876)	(0.333)	(0.703)
Observations	165	165	165	165	165	165	165	165
R^2	0.597	0.112	0.610	0.232	0.086	0.248	0.585	0.263
Adjusted R^2	0.585	0.084	0.590	0.208	0.058	0.209	0.580	0.254
Residual Std. Error	0.681	1.011	0.676	1.084	1.182	1.083	0.854	1.685
	(df = 159)	(df = 159)	(df = 156)	(df = 159)	(df = 159)	(df = 156)	(df = 162)	(df = 162)
F Statistic	47.143***	3.998***	30.546***	9.613***	3.008**	6.418***	114.323***	28.972***
	(df = 5; 159)	(df = 5; 159)	(df = 8; 156)	(df = 5; 159)	(df = 5; 159)	(df = 8; 156)	(df = 2; 162)	(df = 2; 162)

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.8: Test data regression results interactions

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	0.247	1.716	−0.022	2.852	6.352**	4.371		
	(1.704)	(2.997)	(2.041)	(2.198)	(3.028)	(2.622)		
Rational appeal	0.019	3.973	0.591	3.541**	7.877***	5.477**		
	(1.153)	(2.405)	(1.600)	(1.487)	(2.430)	(2.055)		
Utilitarian	0.996***		0.979***	1.332***		1.087***		
	(0.204)		(0.285)	(0.263)		(0.366)		
Emotional appeal:Utilitarian	−0.021		−0.268	−0.670		−0.271		
	(0.344)		(0.484)	(0.444)		(0.621)		
Rational appeal:Utilitarian	−0.054		0.074	−0.785**		−0.396		
	(0.253)		(0.330)	(0.327)		(0.424)		
Hedonic		0.906**	0.031		1.419***	0.447		
		(0.411)	(0.364)		(0.415)	(0.468)		
Emotional appeal:Hedonic		−0.168	0.283		−1.116*	−0.631		
		(0.551)	(0.491)		(0.557)	(0.631)		
Rational appeal:Hedonic		−0.729	−0.236		−1.436***	−0.715		
		(0.454)	(0.389)		(0.459)	(0.500)		
Attitude towards the website							0.259***	−0.008
							(0.060)	(0.118)
Perceived usefulness							0.790***	0.952***
							(0.069)	(0.125)
Constant	−0.091	−0.578	−0.182	−1.442	−3.189	−2.750	−0.628*	−0.526
	(0.908)	(2.198)	(1.398)	(1.171)	(2.221)	(1.796)	(0.333)	(0.703)
Observations	41	41	41	41	41	41	165	165
R^2	0.720	0.307	0.745	0.526	0.279	0.572	0.585	0.263
Adjusted R^2	0.680	0.208	0.682	0.458	0.175	0.465	0.580	0.254
Residual Std. Error	0.748	1.177	0.746	0.964	1.189	0.958	0.854	1.685
	(df = 35)	(df = 35)	(df = 32)	(df = 35)	(df = 35)	(df = 32)	(df = 162)	(df = 162)
F Statistic	18.015***	3.100**	11.717***	7.757***	2.702**	5.341***	114.323***	28.972***
	(df = 5; 35)	(df = 5; 35)	(df = 8; 32)	(df = 5; 35)	(df = 5; 35)	(df = 8; 32)	(df = 2; 162)	(df = 2; 162)

Note: *p<0.1; **p<0.05; ***p<0.01

G.3 Regression results using linear mixed models

Table G.9: Linear Mixed Model regression results using market category

	Dependent variable:							
	Perceived usefulness				Attitude towards the website			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	0.209	0.163	0.201	0.162	0.167	0.151	0.160	0.148
	(0.200)	(0.123)	(0.185)	(0.123)	(0.221)	(0.194)	(0.213)	(0.194)
Rational appeal	0.295	0.096	0.375**	0.080	0.321	0.178	0.383*	0.184
	(0.188)	(0.116)	(0.174)	(0.117)	(0.208)	(0.183)	(0.201)	(0.185)
Utilitarian		0.915***		0.943***		0.641***		0.631***
		(0.050)		(0.058)		(0.078)		(0.087)
Hedonic			0.481***	−0.060			0.342***	0.017
			(0.082)	(0.061)			(0.090)	(0.076)
Constant	4.340***	0.099	1.929***	0.259	4.572***	1.654***	2.904***	1.611***
	(0.145)	(0.267)	(0.480)	(0.313)	(0.188)	(0.383)	(0.493)	(0.435)
Observations	206	206	206	206	206	206	206	206
Log Likelihood	−315.499	−219.934	−303.905	−221.331	−336.519	−309.768	−331.499	−311.408
Akaike Inf. Crit.	640.998	451.868	619.810	456.662	683.038	631.537	674.998	636.817
Bayesian Inf. Crit.	657.637	471.836	639.778	479.957	699.677	651.504	694.965	660.112

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.10: Linear Mixed Model regression results using market category

	Dependent variable:	
	Net Promoter Score	Purchase Probability
	(1)	(2)
Perceived usefulness	0.781***	0.931***
	(0.061)	(0.121)
Attitude towards the website	0.249***	−0.054
	(0.055)	(0.109)
Constant	−0.389	−0.164
	(0.321)	(0.586)
Observations	206	206
Log Likelihood	−267.903	−405.298
Akaike Inf. Crit.	545.805	820.596
Bayesian Inf. Crit.	562.445	837.236
Note:		*p<0.1; **p<0.05; ***p<0.01

Table G.11: Linear Mixed Model regression results using influence

	Dependent variable:							
	Perceived usefulness				Attitude towards the website			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	0.098	0.256*	0.109	0.255*	−0.337	−0.189	−0.326	−0.189
	(0.237)	(0.146)	(0.218)	(0.147)	(0.285)	(0.237)	(0.273)	(0.238)
Rational appeal	0.030	0.122	0.200	0.129	−0.096	0.003	0.062	0.002
	(0.222)	(0.138)	(0.209)	(0.141)	(0.268)	(0.222)	(0.261)	(0.227)
Utilitarian		0.864***		0.854***		0.763***		0.763***
		(0.061)		(0.070)		(0.099)		(0.113)
Hedonic			0.328***	0.016			0.297***	−0.0003
			(0.070)	(0.053)			(0.088)	(0.086)
Constant	4.701***	0.398	3.020***	0.369	5.047***	1.209**	3.518***	1.214**
	(0.173)	(0.330)	(0.424)	(0.349)	(0.326)	(0.533)	(0.601)	(0.567)
Observations	125	125	125	125	125	125	125	125
Log Likelihood	−179.731	−122.554	−171.823	−124.530	−203.164	−180.694	−199.307	−182.229
Akaike Inf. Crit.	369.461	257.109	355.645	263.060	416.328	373.388	410.613	378.458
Bayesian Inf. Crit.	383.603	274.079	372.615	282.858	430.469	390.358	427.583	398.257
Note:								*p<0.1; **p<0.05; ***p<0.01

Table G.12: Linear Mixed Model regression results using influence

	Dependent variable:	
	Net Promoter Score	Purchase Probability
	(1)	(2)
Perceived usefulness	0.765***	0.932***
	(0.084)	(0.182)
Attitude towards the website	0.282***	0.100
	(0.068)	(0.148)
Constant	−0.432	−0.853
	(0.392)	(0.829)
Observations	125	125
Log Likelihood	−155.827	−250.729
Akaike Inf. Crit.	321.653	511.458
Bayesian Inf. Crit.	335.795	525.599
Note:		*p<0.1; **p<0.05; ***p<0.01

G.4 Results without mahalanobis distance outliers

This appendix includes the regression results when running the analyses without mahalanobis distance outliers. The cells that are marked grey, are those that are different in significance than the main results.

Table G.13: Results of the regression analyses without outliers

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	0.210*	0.268	0.213*	0.239	0.260	0.229		
	(0.123)	(0.184)	(0.123)	(0.198)	(0.212)	(0.197)		
Rational appeal	0.148	0.395**	0.139	0.256	0.434**	0.285		
	(0.117)	(0.174)	(0.118)	(0.188)	(0.201)	(0.188)		
Utilitarian	0.882***		0.904***	0.594***		0.524***		
	(0.050)		(0.059)	(0.080)		(0.094)		
Hedonic		0.399***	−0.037		0.375***	0.122		
		(0.069)	(0.054)		(0.079)	(0.086)		
Attitude towards the website							0.237***	−0.023
							(0.055)	(0.106)
Perceived usefulness							0.784***	1.004***
							(0.062)	(0.111)
Constant	0.297	2.306***	0.385	1.775***	2.603***	1.489***	−0.449	−0.693
	(0.242)	(0.363)	(0.273)	(0.389)	(0.418)	(0.437)	(0.288)	(0.558)
Observations	195	195	195	195	195	195	195	195
R^2	0.628	0.168	0.629	0.237	0.122	0.245	0.600	0.310
Adjusted R^2	0.623	0.155	0.622	0.225	0.108	0.229	0.596	0.302
Residual Std. Error	0.663 (df = 191)	0.992 (df = 191)	0.664	1.067	1.145	1.064	0.829	1.609
	(df = 191)	(df = 191)	(df = 190)	(df = 191)	(df = 191)	(df = 190)	(df = 192)	(df = 192)
F Statistic	107.663***	12.867***	80.647***	19.789***	8.847***	15.415***	143.989***	43.055***
	(df = 3; 191)	(df = 3; 191)	(df = 4; 190)	(df = 3; 191)	(df = 3; 191)	(df = 4; 190)	(df = 2; 192)	(df = 2; 192)

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.14: Results of the regression analyses for the interactions without outliers

	Dependent variable:					
	Perceived usefulness			Attitude towards the website		
	(1)	(2)	(3)	(4)	(5)	(6)
Emotional appeal	−1.159*	−0.514	−1.370*	−0.931	0.638	−0.331
	(0.624)	(0.957)	(0.723)	(1.013)	(1.101)	(1.163)
Rational appeal	−0.357	0.124	−0.433	0.229	1.557	1.023
	(0.554)	(0.850)	(0.640)	(0.898)	(0.979)	(1.030)
Utilitarian	0.754***		0.792***	0.524***		0.354**
	(0.092)		(0.108)	(0.149)		(0.174)
Emotional appeal:Utilitarian	0.299**		0.255	0.254		0.365
	(0.134)		(0.157)	(0.217)		(0.253)
Rational appeal:Utilitarian	0.113		0.107	0.009		0.168
	(0.118)		(0.139)	(0.191)		(0.224)
Hedonic		0.329**	−0.073		0.503***	0.324*
		(0.137)	(0.106)		(0.158)	(0.171)
Emotional appeal:Hedonic		0.156	0.083		−0.078	−0.225
		(0.188)	(0.146)		(0.216)	(0.235)
Rational appeal:Hedonic		0.055	0.018		−0.231	−0.305
		(0.171)	(0.133)		(0.196)	(0.214)
Constant	0.876**	2.650***	1.063**	2.090***	1.969**	1.259
	(0.423)	(0.688)	(0.506)	(0.687)	(0.791)	(0.813)
Observations	195	195	195	195	195	195
R^2	0.638	0.171	0.640	0.244	0.129	0.260
Adjusted R^2	0.629	0.149	0.624	0.225	0.106	0.229
Residual Std. Error	0.658	0.996	0.662	1.067	1.146	1.065
	(df = 189)	(df = 189)	(df = 186)	(df = 189)	(df = 189)	(df = 186)
F Statistic	66.648***	7.816***	41.324***	12.233***	5.604***	8.184***
	(df = 5; 189)	(df = 5; 189)	(df = 8; 186)	(df = 5; 189)	(df = 5; 189)	(df = 8; 186)

Note: *p<0.1; **p<0.05; ***p<0.01

G.5 Bogus questions

Table G.15: Results of the influence of the bogus questions on the answers per main construct

	Dependent variable:					
	Net Promoter Score	Purchase Probability	Attitude towards the website	Perceived usefulness	Utilitarian	Hedonic
	(1)	(2)	(3)	(4)	(5)	(6)
'Select me' wrong	−0.356*	−0.418	−0.366**	−0.479***	−0.450***	0.120
	(0.193)	(0.280)	(0.173)	(0.155)	(0.134)	(0.159)
Fish question wrong	−0.150	0.344	−0.429	0.155	0.293	0.019
	(0.341)	(0.496)	(0.307)	(0.274)	(0.237)	(0.282)
Constant	4.419***	3.894***	4.993***	4.763***	4.882***	4.836***
	(0.137)	(0.199)	(0.123)	(0.110)	(0.095)	(0.113)
Observations	206	206	206	206	206	206
R^2	0.020	0.012	0.037	0.045	0.054	0.003
Adjusted R^2	0.010	0.002	0.028	0.036	0.045	−0.007
Residual Std. Error (df = 203)	1.357	1.971	1.219	1.091	0.943	1.121
F Statistic (df = 2; 203)	2.030	1.200	3.925**	4.777***	5.818***	0.310

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.16: Results of the regression run for all respondents who had the select me question wrong

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	0.248	0.408	0.238	−0.183	−0.071	−0.195		
	(0.167)	(0.287)	(0.167)	(0.283)	(0.329)	(0.284)		
Rational appeal	0.179	0.481*	0.145	−0.156	0.046	−0.199		
	(0.152)	(0.263)	(0.155)	(0.257)	(0.302)	(0.263)		
Utilitarian	0.917***		0.949***	0.652***		0.692***		
	(0.063)		(0.069)	(0.107)		(0.118)		
Hedonic		0.240***	−0.060		0.142	−0.076		
		(0.085)	(0.054)		(0.097)	(0.091)		
Attitude towards the website							0.265***	0.003
							(0.090)	(0.153)
Perceived usefulness							0.841***	0.823***
							(0.099)	(0.150)
Constant	0.131	3.279***	0.285	1.910***	4.291***	2.107***	−0.911*	−0.035
	(0.324)	(0.476)	(0.352)	(0.548)	(0.546)	(0.598)	(0.476)	(0.810)
Observations	99	99	99	99	99	99	99	99
R^2	0.695	0.099	0.699	0.281	0.023	0.286	0.589	0.207
Adjusted R^2	0.686	0.071	0.686	0.258	-0.008	0.256	0.581	0.191
Residual Std. Error	0.619	1.064	0.618	1.047	1.221	1.049	0.945	1.799
	(df = 95)	(df = 95)	(df = 94)	(df = 95)	(df = 95)	(df = 94)	(df = 96)	(df = 96)
F Statistic	72.222***	3.490**	54.609***	12.375***	0.740	9.425***	68.861***	12.561***
	(df = 3; 95)	(df = 3; 95)	(df = 4; 94)	(df = 3; 95)	(df = 3; 95)	(df = 4; 94)	(df = 2; 96)	(df = 2; 96)

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.17: Results of the regression run for all respondents who had the select me question right

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	0.094	−0.054	0.086	0.420	0.279	0.362		
	(0.186)	(0.245)	(0.189)	(0.266)	(0.281)	(0.267)		
Rational appeal	0.030	0.177	0.033	0.461*	0.569**	0.484*		
	(0.182)	(0.237)	(0.183)	(0.259)	(0.271)	(0.258)		
Utilitarian	0.850***		0.837***	0.601***		0.493***		
	(0.083)		(0.098)	(0.119)		(0.139)		
Hedonic		0.452***	0.024		0.450***	0.199		
		(0.105)	(0.095)		(0.120)	(0.135)		
Attitude towards the website							0.281***	−0.062
							(0.071)	(0.144)
Perceived usefulness							0.699***	0.990***
							(0.081)	(0.158)
Constant	0.461	2.017***	0.401	1.572***	2.035***	1.083*	−0.248	−0.456
	(0.392)	(0.542)	(0.458)	(0.559)	(0.621)	(0.647)	(0.383)	(0.789)
Observations	107	107	107	107	107	107	107	107
R^2	0.505	0.155	0.505	0.228	0.151	0.244	0.567	0.286
Adjusted R^2	0.491	0.130	0.486	0.206	0.126	0.215	0.558	0.272
Residual Std. Error	0.768	1.003	0.771	1.094	1.148	1.088	0.831	1.654
	(df = 103)	(df = 103)	(df = 102)	(df = 103)	(df = 103)	(df = 102)	(df = 104)	(df = 104)
F Statistic	35.032***	6.302***	26.052***	10.154***	6.115***	8.247***	68.006***	20.844***
	(df = 3; 103)	(df = 3; 103)	(df = 4; 102)	(df = 3; 103)	(df = 3; 103)	(df = 4; 102)	(df = 2; 104)	(df = 2; 104)

Note: *p<0.1; **p<0.05; ***p<0.01

G.6 Results ordered per open type

These results have been limited, for this report, to those who used a computer or laptop. This has been done since the websites have primarily been designed for computers and laptops (although of course certain alterations have been done to make it viewable on smaller screens). Additionally, doing regressions using only those who viewed it on a mobile or tablet would cause assumption violations since the sample size would be small. Causing for certain analyses that the normality assumption would be violated. Therefore, no such analysis has been done for the other open types.

Table G.18: Regression results when only using looking the open types as independent variables

	Dependent variable:					
	Attitude towards the website	Perceived usefulness	Hedonic	Utilitarian	Purchase Probability	Net Promoter Score
	(1)	(2)	(3)	(4)	(5)	(6)
Opened with tablet	−0.135	−0.055	−0.158	−0.054	−0.054	−0.252
	(0.364)	(0.327)	(0.335)	(0.281)	(0.593)	(0.397)
Opened with smartphone	0.652***	0.594***	0.206	0.623***	0.178	0.887***
	(0.227)	(0.204)	(0.209)	(0.175)	(0.370)	(0.248)
Constant	4.662***	4.430***	4.874***	4.571***	3.679***	4.085***
	(0.096)	(0.087)	(0.089)	(0.075)	(0.157)	(0.105)
Observations	206	206	206	206	206	206
R^2	0.041	0.041	0.006	0.060	0.001	0.064
Adjusted R^2	0.032	0.032	−0.003	0.051	−0.009	0.055
Residual Std. Error (df = 203)	1.217	1.093	1.119	0.940	1.981	1.326
F Statistic (df = 2; 203)	4.359**	4.358**	0.656	6.484***	0.126	6.959***
Note:						*p<0.1; **p<0.05; ***p<0.01

Table G.19: Regression results when using only those who have seen the website with a computer

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	0.267	0.186	0.187	0.185	0.149	0.137		
	(0.220)	(0.153)	(0.154)	(0.251)	(0.233)	(0.233)		
Rational appeal	0.405**	0.113	0.109	0.476**	0.262	0.298		
	(0.201)	(0.141)	(0.143)	(0.230)	(0.215)	(0.216)		
Hedonic	0.383***		−0.012	0.348***		0.110		
	(0.077)		(0.062)	(0.088)		(0.094)		
Utilitarian		0.885***	0.892***		0.599***	0.537***		
		(0.061)	(0.070)		(0.092)	(0.106)		
Attitude towards the website							0.264***	0.086
							(0.062)	(0.112)
Perceived usefulness							0.773***	1.013***
							(0.069)	(0.124)
Constant	2.307***	0.276	0.305	2.706***	1.767***	1.501***	−0.568*	−1.199**
	(0.408)	(0.289)	(0.326)	(0.466)	(0.440)	(0.495)	(0.337)	(0.606)
Observations	158	158	158	158	158	158	158	158
R^2	0.155	0.589	0.589	0.109	0.230	0.236	0.578	0.353
Adjusted R^2	0.138	0.581	0.578	0.092	0.215	0.216	0.573	0.345
Residual Std. Error	1.038	0.724	0.727	1.186	1.103	1.101	0.892	1.605
	(df = 154)	(df = 154)	(df = 153)	(df = 154)	(df = 154)	(df = 153)	(df = 155)	(df = 155)
F Statistic	9.387***	73.473***	54.770***	6.308***	15.299***	11.844***	106.232***	42.370***
	(df = 3; 154)	(df = 3; 154)	(df = 4; 153)	(df = 3; 154)	(df = 3; 154)	(df = 4; 153)	(df = 2; 155)	(df = 2; 155)

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.20: Regression results when using only those who have seen the website with a computer

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	−1.224	−1.267	−1.618*	0.513	−1.224	−0.397		
	(1.128)	(0.789)	(0.900)	(1.271)	(1.209)	(1.351)		
Rational appeal	−0.003	0.024	−0.274	2.648**	0.541	1.881*		
	(0.910)	(0.652)	(0.745)	(1.026)	(0.999)	(1.118)		
Hedonic	0.275*		−0.109	0.594***		0.452**		
	(0.149)		(0.119)	(0.168)		(0.178)		
Emotional appeal:Hedonic	0.297		0.144	−0.074		−0.308		
	(0.221)		(0.181)	(0.249)		(0.272)		
Rational appeal:Hedonic	0.083		0.119	−0.452**		−0.543**		
	(0.184)		(0.147)	(0.207)		(0.220)		
Utilitarian		0.804***	0.862***		0.562***	0.320		
		(0.113)	(0.130)		(0.173)	(0.195)		
Emotional appeal:Utilitarian		0.319*	0.239		0.300	0.451		
		(0.171)	(0.203)		(0.263)	(0.305)		
Rational appeal:Utilitarian		0.024	−0.040		−0.058	0.234		
		(0.141)	(0.163)		(0.217)	(0.244)		
Attitude towards the website							0.264***	0.086
							(0.062)	(0.112)
Perceived usefulness							0.773***	1.013***
							(0.069)	(0.124)
Constant	2.836***	0.635	0.909	1.502*	1.928**	0.786	−0.568*	−1.199**
	(0.744)	(0.510)	(0.594)	(0.838)	(0.781)	(0.892)	(0.337)	(0.606)
Observations	158	158	158	158	158	158	158	158
R^2	0.165	0.600	0.603	0.143	0.241	0.277	0.578	0.353
Adjusted R^2	0.138	0.587	0.581	0.114	0.216	0.239	0.573	0.345
Residual Std. Error	1.039	0.719	0.724	1.171	1.102	1.086	0.892	1.605
	(df = 152)	(df = 152)	(df = 149)	(df = 152)	(df = 152)	(df = 149)	(df = 155)	(df = 155)
F Statistic	6.013***	45.646***	28.253***	5.053***	9.669***	7.149***	106.232***	42.370***
	(df = 5; 152)	(df = 5; 152)	(df = 8; 149)	(df = 5; 152)	(df = 5; 152)	(df = 8; 149)	(df = 2; 155)	(df = 2; 155)

Note: *p<0.1; **p<0.05; ***p<0.01

G.7 Markets

Table G.21: Results for the clustering of football and hockey clubs

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	0.232*	0.202	0.231*	0.225	0.213	0.228		
	(0.138)	(0.199)	(0.138)	(0.232)	(0.243)	(0.232)		
Rational appeal	0.208	0.387**	0.191	0.147	0.292	0.186		
	(0.132)	(0.192)	(0.134)	(0.223)	(0.234)	(0.224)		
Utilitarian	0.918***		0.966***	0.640***		0.522***		
	(0.056)		(0.077)	(0.094)		(0.130)		
Hedonic		0.639***	−0.075		0.568***	0.182		
		(0.086)	(0.083)		(0.105)	(0.139)		
Attitude towards the website							0.242***	−0.087
							(0.062)	(0.122)
Perceived usefulness							0.860***	0.914***
							(0.070)	(0.139)
Constant	0.161	1.081**	0.327	1.623***	1.627***	1.220**	−0.895***	−0.137
	(0.278)	(0.472)	(0.333)	(0.467)	(0.577)	(0.558)	(0.330)	(0.652)
Observations	147	147	147	147	147	147	147	147
R^2	0.657	0.285	0.659	0.248	0.173	0.258	0.644	0.256
Adjusted R^2	0.650	0.270	0.650	0.233	0.155	0.237	0.639	0.246
Residual Std. Error	0.649 (df = 143)	0.937 (df = 143)	0.649 (df = 142)	1.091 (df = 143)	1.144 (df = 143)	1.088 (df = 142)	0.832 (df = 144)	1.643 (df = 144)
F Statistic	91.458*** (df = 3; 143)	19.037*** (df = 3; 143)	68.711*** (df = 4; 142)	15.758*** (df = 3; 143)	9.961*** (df = 3; 143)	12.312*** (df = 4; 142)	130.252*** (df = 2; 144)	24.836*** (df = 2; 144)

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.22: Results for the clustering of football and hockey clubs

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	−1.228*	0.131	−1.199	−0.863	1.740	0.733		
	(0.703)	(1.235)	(0.875)	(1.197)	(1.488)	(1.424)		
Rational appeal	−0.452	−0.194	−0.595	−0.171	2.975**	2.339*		
	(0.626)	(1.106)	(0.769)	(1.066)	(1.333)	(1.252)		
Utilitarian	0.772***		0.832***	0.548***		−0.056		
	(0.103)		(0.150)	(0.175)		(0.245)		
Emotional appeal:Utilitarian	0.318**		0.312	0.238		0.734**		
	(0.150)		(0.204)	(0.256)		(0.331)		
Rational appeal:Utilitarian	0.143		0.106	0.069		0.842***		
	(0.131)		(0.193)	(0.224)		(0.314)		
Hedonic		0.584***	−0.092		0.888***	0.933***		
		(0.168)	(0.168)		(0.203)	(0.274)		
Emotional appeal:Hedonic		0.013	−0.0005		−0.293	−0.747**		
		(0.235)	(0.219)		(0.284)	(0.357)		
Rational appeal:Hedonic		0.113	0.059		−0.522**	−1.179***		
		(0.212)	(0.212)		(0.255)	(0.345)		
Attitude towards the website							0.242***	−0.087
							(0.062)	(0.122)
Perceived usefulness							0.860***	0.914***
							(0.070)	(0.139)
Constant	0.835*	1.370	1.039*	2.047**	−0.039	−0.017	−0.895***	−0.137
	(0.485)	(0.889)	(0.614)	(0.826)	(1.071)	(1.001)	(0.330)	(0.652)
Observations	147	147	147	147	147	147	147	147
R^2	0.668	0.287	0.670	0.253	0.197	0.320	0.644	0.256
Adjusted R^2	0.656	0.262	0.651	0.227	0.168	0.281	0.639	0.246
Residual Std. Error	0.643 (df = 141)	0.942 (df = 141)	0.648 (df = 138)	1.095 (df = 141)	1.136 (df = 141)	1.056 (df = 138)	0.832 (df = 144)	1.643 (df = 144)
F Statistic	56.723*** (df = 5; 141)	11.368*** (df = 5; 141)	35.000*** (df = 8; 138)	9.565*** (df = 5; 141)	6.911*** (df = 5; 141)	8.134*** (df = 8; 138)	130.252*** (df = 2; 144)	24.836*** (df = 2; 144)

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.23: Results for the clustering of physiotherapy, fitness and football schools

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	−0.091	0.236	−0.051	−0.235	−0.128	−0.245		
	(0.376)	(0.530)	(0.361)	(0.409)	(0.436)	(0.417)		
Rational appeal	−0.289	0.207	−0.351	−0.117	0.127	−0.101		
	(0.380)	(0.522)	(0.365)	(0.413)	(0.430)	(0.422)		
Utilitarian	1.012***		1.293***	0.598***		0.529*		
	(0.173)		(0.224)	(0.188)		(0.259)		
Hedonic		0.483*	−0.443*		0.488**	0.109		
		(0.261)	(0.238)		(0.215)	(0.275)		
Attitude towards the website							0.271*	0.409
							(0.138)	(0.335)
Perceived usefulness							0.670***	1.201***
							(0.116)	(0.281)
Constant	−0.434	1.546	0.634	2.125**	2.233*	1.861	0.441	−2.949*
	(0.811)	(1.412)	(0.966)	(0.882)	(1.163)	(1.115)	(0.677)	(1.643)
Observations	31	31	31	31	31	31	31	31
R^2	0.570	0.135	0.620	0.280	0.169	0.284	0.660	0.501
Adjusted R^2	0.522	0.039	0.562	0.200	0.077	0.174	0.636	0.465
Residual Std. Error	0.836	1.186	0.800	0.909	0.976	0.924	0.707	1.715
	(df = 27)	(df = 27)	(df = 26)	(df = 27)	(df = 27)	(df = 26)	(df = 28)	(df = 28)
F Statistic	11.935***	1.405	10.627***	3.495**	1.832	2.579*	27.201***	14.042***
	(df = 3; 27)	(df = 3; 27)	(df = 4; 26)	(df = 3; 27)	(df = 3; 27)	(df = 4; 26)	(df = 2; 28)	(df = 2; 28)

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.24: Results for the clustering of physiotherapy, fitness and football schools

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	−3.464*	−7.105**	−5.767**	−1.975	−2.668	−1.798		
	(1.772)	(3.000)	(2.287)	(2.019)	(2.979)	(3.117)		
Rational appeal	−2.190	3.446	−1.599	−2.654	0.443	−2.422		
	(2.446)	(2.906)	(2.530)	(2.787)	(2.885)	(3.448)		
Utilitarian	0.673**		0.897***	0.372		0.320		
	(0.247)		(0.282)	(0.281)		(0.384)		
Emotional appeal:Utilitarian	0.713*		0.026	0.373		0.358		
	(0.366)		(0.722)	(0.417)		(0.983)		
Rational appeal:Utilitarian	0.416		0.686	0.529		0.560		
	(0.492)		(0.506)	(0.561)		(0.690)		
Hedonic		0.256	−0.450		0.356	0.104		
		(0.384)	(0.354)		(0.381)	(0.483)		
Emotional appeal:Hedonic		1.314**	1.024		0.459	−0.021		
		(0.544)	(0.846)		(0.540)	(1.153)		
Rational appeal:Hedonic		−0.581	−0.362		−0.052	−0.070		
		(0.536)	(0.464)		(0.533)	(0.632)		
Attitude towards the website							0.271*	0.409
							(0.138)	(0.335)
Perceived usefulness							0.670***	1.201***
							(0.116)	(0.281)
Constant	1.077	2.736	2.435	3.129**	2.922	2.814	0.441	−2.949*
	(1.127)	(2.033)	(1.467)	(1.284)	(2.019)	(1.999)	(0.677)	(1.643)
Observations	31	31	31	31	31	31	31	31
R^2	0.627	0.430	0.740	0.314	0.204	0.316	0.660	0.501
Adjusted R^2	0.553	0.316	0.645	0.177	0.045	0.068	0.636	0.465
Residual Std. Error	0.809	1.000	0.720	0.922	0.993	0.981	0.707	1.715
	(df = 25)	(df = 25)	(df = 22)	(df = 25)	(df = 25)	(df = 22)	(df = 28)	(df = 28)
F Statistic	8.418***	3.775**	7.828***	2.292*	1.280	1.272	27.201***	14.042***
	(df = 5; 25)	(df = 5; 25)	(df = 8; 22)	(df = 5; 25)	(df = 5; 25)	(df = 8; 22)	(df = 2; 28)	(df = 2; 28)

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.25: Results for the clustering of physical education

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	−0.032	0.190	−0.003	0.217	0.405	0.257		
	(0.418)	(0.559)	(0.420)	(0.709)	(0.756)	(0.716)		
Rational appeal	−0.141	−0.103	−0.196	0.648	0.640	0.570		
	(0.326)	(0.443)	(0.332)	(0.553)	(0.599)	(0.566)		
Utilitarian	0.825***		0.741***	0.688***		0.567*		
	(0.139)		(0.166)	(0.236)		(0.283)		
Hedonic		−0.900***	−0.253		−0.856**	−0.361		
		(0.301)	(0.268)		(0.407)	(0.456)		
Attitude towards the website							0.363*	−0.099
							(0.183)	(0.320)
Perceived usefulness							0.468*	0.647
							(0.240)	(0.420)
Constant	0.702	7.367***	1.922	1.229	7.139***	2.967	0.080	1.070
	(0.671)	(1.060)	(1.455)	(1.138)	(1.433)	(2.479)	(0.917)	(1.600)
Observations	28	28	28	28	28	28	28	28
R^2	0.598	0.277	0.613	0.329	0.232	0.346	0.440	0.107
Adjusted R^2	0.547	0.187	0.545	0.245	0.136	0.233	0.396	0.036
Residual Std. Error	0.732	0.981	0.733	1.240	1.326	1.250	1.078	1.882
	(df = 24)	(df = 24)	(df = 23)	(df = 24)	(df = 24)	(df = 23)	(df = 25)	(df = 25)
F Statistic	11.883***	3.068**	9.097***	3.918**	2.418*	3.049**	9.839***	1.504
	(df = 3; 24)	(df = 3; 24)	(df = 4; 23)	(df = 3; 24)	(df = 3; 24)	(df = 4; 23)	(df = 2; 25)	(df = 2; 25)

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.26: Results for the clustering of physical education

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	1.946	−6.310**	2.649	2.513	−4.260	15.603		
	(2.693)	(2.502)	(6.383)	(4.496)	(3.762)	(11.038)		
Rational appeal	2.502*	−2.294	7.636	5.494**	−2.477	20.150*		
	(1.427)	(2.115)	(5.830)	(2.383)	(3.180)	(10.082)		
Utilitarian	1.230***		1.485**	1.409***		2.631**		
	(0.253)		(0.583)	(0.423)		(1.008)		
Emotional appeal:Utilitarian	−0.442		−0.579	−0.526		−1.775		
	(0.574)		(0.781)	(0.959)		(1.350)		
Rational appeal:Utilitarian	−0.577*		−0.977	−1.056**		−2.395**		
	(0.304)		(0.612)	(0.507)		(1.058)		
Hedonic		−1.705***	0.453		−1.656**	2.167		
		(0.509)	(0.936)		(0.766)	(1.619)		
Emotional appeal:Hedonic		1.943**	−0.041		1.397	−2.262		
		(0.733)	(1.027)		(1.102)	(1.777)		
Rational appeal:Hedonic		0.641	−1.055		0.955	−2.654		
		(0.652)	(1.003)		(0.981)	(1.734)		
Attitude towards the website							0.363*	−0.099
							(0.183)	(0.320)
Perceived usefulness							0.468*	0.647
							(0.240)	(0.420)
Constant	−1.097	10.044***	−3.740	−1.977	9.797***	−14.622	0.080	1.070
	(1.154)	(1.722)	(5.577)	(1.927)	(2.589)	(9.644)	(0.917)	(1.600)
Observations	28	28	28	28	28	28	28	28
R^2	0.654	0.458	0.714	0.440	0.288	0.504	0.440	0.107
Adjusted R^2	0.576	0.334	0.594	0.313	0.126	0.295	0.396	0.036
Residual Std. Error	0.708	0.887	0.693	1.182	1.334	1.198	1.078	1.882
	(df = 22)	(df = 22)	(df = 19)	(df = 22)	(df = 22)	(df = 19)	(df = 25)	(df = 25)
F Statistic	8.334***	3.713**	5.937***	3.464**	1.779	2.410*	9.839***	1.504
F Statistic	(df = 5; 22)	(df = 5; 22)	(df = 8; 19)	(df = 5; 22)	(df = 5; 22)	(df = 8; 19)	(df = 2; 25)	(df = 2; 25)

Note: *p<0.1; **p<0.05; ***p<0.01

G.8 Time on website

Table G.27: Results when using the time someone was on the website

	Dependent variable:					
	Attitude towards the website	Perceived Usefulness	Hedonic	Utilitarian	Purchase Probability	Net Promoter Score
	(1)	(2)	(3)	(4)	(5)	(6)
Total time on website	−0.0001	−0.001	−0.0004	−0.0003	−0.0002	−0.0002
	(0.0004)	(0.0003)	(0.0003)	(0.0003)	(0.001)	(0.0004)
Constant	4.789***	4.603***	4.988***	4.726***	3.788***	4.261***
	(0.106)	(0.095)	(0.095)	(0.083)	(0.171)	(0.118)
Observations	194	194	194	194	194	194
R^2	0.0003	0.011	0.007	0.004	0.001	0.002
Adjusted R^2	−0.005	0.006	0.002	−0.001	−0.005	−0.003
Residual Std. Error (df = 192)	1.239	1.117	1.117	0.969	2.005	1.382
F Statistic (df = 1; 192)	0.065	2.180	1.394	0.762	0.108	0.330

Note: *p<0.1; **p<0.05; ***p<0.01

G.9 Time to fill in the survey

Table G.28: Results for those taking less than fifteen and more than three minutes to fill in the survey

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	0.229*	0.230	0.235*	−0.007	−0.012	−0.009		
	(0.137)	(0.212)	(0.137)	(0.213)	(0.242)	(0.214)		
Rational appeal	0.067	0.278	0.044	−0.012	0.160	−0.003		
	(0.128)	(0.199)	(0.129)	(0.200)	(0.227)	(0.202)		
Utilitarian	0.888***		0.919***	0.655***		0.643***		
	(0.054)		(0.059)	(0.084)		(0.092)		
Hedonic		0.266***	−0.065		0.256***	0.025		
		(0.072)	(0.051)		(0.082)	(0.080)		
Attitude towards the website							0.284***	0.004
							(0.064)	(0.122)
Perceived usefulness							0.764***	0.872***
							(0.072)	(0.136)
Constant	0.303	3.068***	0.483	1.730***	3.468***	1.661***	−0.583*	−0.190
	(0.267)	(0.392)	(0.301)	(0.416)	(0.447)	(0.473)	(0.336)	(0.639)
Observations	175	175	175	175	175	175	175	175
R^2	0.619	0.082	0.623	0.265	0.055	0.265	0.567	0.234
Adjusted R^2	0.613	0.066	0.614	0.252	0.039	0.248	0.562	0.225
Residual Std. Error	0.685	1.064	0.684	1.069	1.212	1.072	0.924	1.755
	(df = 171)	(df = 171)	(df = 170)	(df = 171)	(df = 171)	(df = 170)	(df = 172)	(df = 172)
F Statistic	92.793***	5.114***	70.262***	20.523***	3.337**	15.336***	112.684***	26.206***
	(df = 3; 171)	(df = 3; 171)	(df = 4; 170)	(df = 3; 171)	(df = 3; 171)	(df = 4; 170)	(df = 2; 172)	(df = 2; 172)

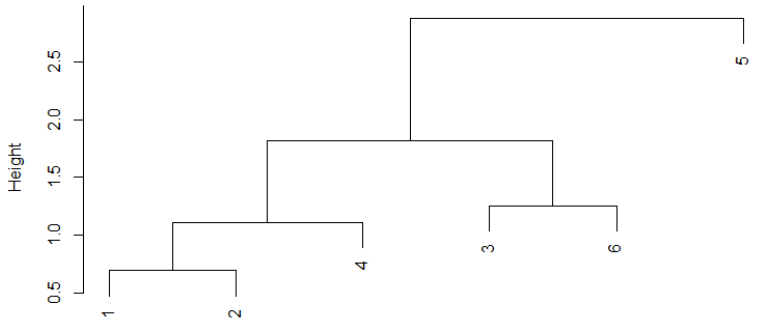
Note: *p<0.1; **p<0.05; ***p<0.01

Table G.29: Results for those taking less than fifteen and more than three minutes to fill in the survey

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	−0.685	−1.479	−1.399*	−0.611	−0.031	−0.293		
	(0.691)	(1.061)	(0.789)	(1.079)	(1.193)	(1.237)		
Rational appeal	0.105	−0.108	−0.499	0.812	2.314**	1.827*		
	(0.609)	(0.874)	(0.688)	(0.951)	(0.983)	(1.079)		
Utilitarian	0.841***		0.961***	0.702***		0.582***		
	(0.100)		(0.111)	(0.156)		(0.174)		
Emotional appeal:Utilitarian	0.197		0.065	0.130		0.173		
	(0.146)		(0.165)	(0.228)		(0.259)		
Rational appeal:Utilitarian	−0.006		−0.117	−0.174		0.003		
	(0.127)		(0.139)	(0.199)		(0.218)		
Hedonic		0.150	−0.243**		0.482***	0.244		
		(0.141)	(0.101)		(0.159)	(0.158)		
Emotional appeal:Hedonic		0.336	0.263*		−0.001	−0.106		
		(0.205)	(0.149)		(0.231)	(0.234)		
Rational appeal:Hedonic		0.075	0.221*		−0.441**	−0.375*		
		(0.173)	(0.122)		(0.194)	(0.191)		
Attitude towards the website							0.284***	0.004
							(0.064)	(0.122)
Perceived usefulness							0.764***	0.872***
							(0.072)	(0.136)
Constant	0.518	3.648***	1.181**	1.509**	2.335***	0.842	−0.583*	−0.190
	(0.472)	(0.724)	(0.543)	(0.738)	(0.814)	(0.852)	(0.336)	(0.639)
Observations	175	175	175	175	175	175	175	175
R^2	0.625	0.099	0.638	0.275	0.095	0.294	0.567	0.234
Adjusted R^2	0.614	0.072	0.621	0.253	0.069	0.260	0.562	0.225
Residual Std. Error	0.684	1.061	0.678	1.068	1.193	1.064	0.924	1.755
	(df = 169)	(df = 169)	(df = 166)	(df = 169)	(df = 169)	(df = 166)	0.924 (df = 172)	(df = 172)
F Statistic	56.424***	3.694***	36.623***	12.792***	3.565***	8.628***	112.684***	26.206***
F Statistic	(df = 5; 169)	(df = 5; 169)	(df = 8; 166)	(df = 5; 169)	(df = 5; 169)	(df = 8; 166)	(df = 2; 172)	(df = 2; 172)

Note: *p<0.1; **p<0.05; ***p<0.01

G.10 Browsers used



1:Safari; 2:Chrome; 3:Internet Explorer; 4: Edge; 5: Firefox; 6: Unknown.

Figure G.1: Dendrogram of clustered markets

Table G.30: Regression results of the effects of the different browsers on the mean scores of the constructs

	Dependent variable:					
	Attitude towards the website	Perceived usefulness	Hedonic	Utilitarian	Purchase Probability	Net Promoter Score
	(1)	(2)	(3)	(4)	(5)	(6)
Chrome	0.066	0.152	0.423**	0.015	0.715**	0.247
	(0.224)	(0.204)	(0.206)	(0.174)	(0.356)	(0.251)
Internet Explorer	−0.364	−0.154	−0.162	−0.201	−0.169	−0.046
	(0.249)	(0.226)	(0.228)	(0.193)	(0.395)	(0.278)
Edge	−1.035***	−0.803***	−0.339	−0.929***	−0.975**	−0.902***
	(0.283)	(0.258)	(0.260)	(0.220)	(0.450)	(0.317)
Firefox	−0.670**	0.104	0.125	−0.083	1.135**	0.210
	(0.320)	(0.291)	(0.294)	(0.249)	(0.508)	(0.358)
Unknown	−0.411	−0.082	−0.425	−0.399	−0.740	−0.096
	(0.377)	(0.343)	(0.346)	(0.293)	(0.598)	(0.422)
Constant	5.022***	4.609***	4.875***	4.849***	3.615***	4.262***
	(0.153)	(0.139)	(0.140)	(0.119)	(0.243)	(0.171)
Observations	206	206	206	206	206	206
R^2	0.091	0.068	0.061	0.098	0.100	0.064
Adjusted R^2	0.068	0.044	0.038	0.076	0.078	0.040
Residual Std. Error (df = 200)	1.194	1.086	1.096	0.927	1.895	1.336
F Statistic (df = 5; 200)	3.998***	2.899**	2.607**	4.367***	4.455***	2.714**

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.31: For edge

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	0.697*	0.800	0.741*	0.288	0.344	0.300		
	(0.368)	(0.511)	(0.356)	(0.507)	(0.576)	(0.520)		
Rational appeal	0.733**	0.947*	0.925**	0.925*	0.998	0.982*		
	(0.352)	(0.518)	(0.360)	(0.486)	(0.584)	(0.527)		
Utilitarian	1.074***		0.882***	0.701***		0.643**		
	(0.142)		(0.182)	(0.196)		(0.266)		
Hedonic		1.068***	0.356		0.625**	0.106		
		(0.241)	(0.223)		(0.271)	(0.326)		
Attitude towards the website							0.207	−0.334
							(0.186)	(0.269)
Perceived usefulness							0.857***	1.072***
							(0.166)	(0.240)
Constant	−0.890	−1.640	−1.842**	0.790	0.654	0.507	−0.730	−0.110
	(0.650)	(1.242)	(0.865)	(0.896)	(1.400)	(1.263)	(0.650)	(0.943)
Observations	25	25	25	25	25	25	25	25
R^2	0.746	0.511	0.775	0.393	0.220	0.397	0.709	0.510
Adjusted R^2	0.710	0.442	0.730	0.307	0.109	0.276	0.683	0.466
Residual Std. Error	0.710	0.985	0.685	0.980	1.111	1.001	0.862	1.251
	(df = 21)	(df = 21)	(df = 20)	(df = 21)	(df = 21)	(df = 20)	(df = 22)	(df = 22)
F Statistic	20.572***	7.325***	17.210***	4.540**	1.978	3.287**	26.861***	11.453***
	(df = 3; 21)	(df = 3; 21)	(df = 4; 20)	(df = 3; 21)	(df = 3; 21)	(df = 4; 20)	(df = 2; 22)	(df = 2; 22)

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.32: For edge

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	−0.968	−1.293	−2.488	−0.714	0.914	−0.063		
	(1.689)	(3.133)	(2.085)	(2.312)	(3.542)	(3.352)		
Rational appeal	0.577	−1.357	−2.092	2.300	3.262	2.807		
	(1.330)	(2.803)	(1.854)	(1.820)	(3.169)	(2.981)		
Utilitarian	0.976***		1.152***	0.806**		0.698		
	(0.242)		(0.314)	(0.332)		(0.505)		
Emotional appeal:Utilitarian	0.398		−0.012	0.242		0.385		
	(0.393)		(0.519)	(0.538)		(0.835)		
Rational appeal:Utilitarian	0.024		−0.491	−0.371		−0.273		
	(0.328)		(0.405)	(0.450)		(0.651)		
Hedonic		0.742	−0.335		0.857	0.204		
		(0.453)	(0.419)		(0.513)	(0.673)		
Emotional appeal:Hedonic		0.426	0.664		−0.112	−0.256		
		(0.633)	(0.594)		(0.716)	(0.955)		
Rational appeal:Hedonic		0.498	1.067*		−0.510	−0.183		
		(0.605)	(0.532)		(0.684)	(0.856)		
Attitude towards the website							0.207	−0.334
							(0.186)	(0.269)
Perceived usefulness							0.857***	1.072***
							(0.166)	(0.240)
Constant	−0.479	−0.027	0.433	0.346	−0.490	−0.211	−0.730	−0.110
	(1.056)	(2.273)	(1.503)	(1.445)	(2.569)	(2.416)	(0.650)	(0.943)
Observations	25	25	25	25	25	25	25	25
R^2	0.761	0.530	0.828	0.439	0.246	0.442	0.709	0.510
Adjusted R^2	0.699	0.406	0.742	0.291	0.047	0.164	0.683	0.466
Residual Std. Error	0.724	1.016	0.669	0.990	1.148	1.076	0.862	1.251
	(df = 19)	(df = 19)	(df = 16)	(df = 19)	(df = 19)	(df = 16)	(df = 22)	(df = 22)
F Statistic	12.125***	4.284***	9.638***	2.973**	1.238	1.587	26.861***	11.453***
	(df = 5; 19)	(df = 5; 19)	(df = 8; 16)	(df = 5; 19)	(df = 5; 19)	(df = 8; 16)	(df = 2; 22)	(df = 2; 22)

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.33: Safari and Internet Explorer

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	0.145	0.198	0.160	0.315	0.334	0.313		
	(0.185)	(0.282)	(0.184)	(0.292)	(0.315)	(0.294)		
Rational appeal	0.013	0.241	−0.016	0.480*	0.621**	0.484*		
	(0.176)	(0.267)	(0.176)	(0.278)	(0.298)	(0.281)		
Utilitarian	0.895***		0.930***	0.503***		0.499***		
	(0.080)		(0.082)	(0.126)		(0.132)		
Hedonic		0.106	−0.098		0.121	0.012		
		(0.094)	(0.064)		(0.105)	(0.103)		
Attitude towards the website							0.269***	−0.268*
							(0.085)	(0.145)
Perceived usefulness							0.689***	0.859***
							(0.096)	(0.164)
Constant	0.230	3.886***	0.540	2.198***	3.957***	2.161***	−0.204	0.952
	(0.394)	(0.499)	(0.440)	(0.622)	(0.556)	(0.704)	(0.477)	(0.815)
Observations	98	98	98	98	98	98	98	98
R^2	0.577	0.022	0.587	0.180	0.054	0.180	0.499	0.224
Adjusted R^2	0.563	−0.009	0.569	0.154	0.024	0.145	0.488	0.208
Residual Std. Error	0.717	1.090	0.712	1.132	1.216	1.138	0.942	1.608
	(df = 94)	(df = 94)	(df = 93)	(df = 94)	(df = 94)	(df = 93)	(df = 95)	(df = 95)
F Statistic	42.699***	0.698	33.063***	6.892***	1.787	5.118***	47.244***	13.746***
	(df = 3; 94)	(df = 3; 94)	(df = 4; 93)	(df = 3; 94)	(df = 3; 94)	(df = 4; 93)	(df = 2; 95)	(df = 2; 95)

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.34: Safari and Internet Explorer

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	−1.510	−1.865	−2.121*	0.178	0.834	0.795		
	(0.994)	(1.337)	(1.102)	(1.608)	(1.512)	(1.809)		
Rational appeal	0.295	0.808	0.150	0.130	2.499**	1.214		
	(0.891)	(1.107)	(1.019)	(1.441)	(1.253)	(1.672)		
Utilitarian	0.828***		0.905***	0.465**		0.375		
	(0.138)		(0.145)	(0.223)		(0.238)		
Emotional appeal:Utilitarian	0.350*		0.274	0.030		0.088		
	(0.208)		(0.231)	(0.336)		(0.378)		
Rational appeal:Utilitarian	−0.055		−0.109	0.073		0.182		
	(0.184)		(0.189)	(0.297)		(0.311)		
Hedonic		0.072	−0.200		0.348*	0.236		
		(0.184)	(0.128)		(0.209)	(0.211)		
Emotional appeal:Hedonic		0.412	0.200		−0.108	−0.185		
		(0.265)	(0.194)		(0.300)	(0.318)		
Rational appeal:Hedonic		−0.124	0.076		−0.395	−0.333		
		(0.226)	(0.154)		(0.255)	(0.254)		
Attitude towards the website							0.269***	−0.268*
							(0.085)	(0.145)
Perceived usefulness							0.689***	0.859***
							(0.096)	(0.164)
Constant	0.540	4.053***	1.151	2.377**	2.858***	1.657	−0.204	0.952
	(0.654)	(0.913)	(0.758)	(1.058)	(1.033)	(1.244)	(0.477)	(0.815)
Observations	98	98	98	98	98	98	98	98
R^2	0.597	0.076	0.616	0.181	0.082	0.197	0.499	0.224
Adjusted R^2	0.575	0.026	0.582	0.136	0.032	0.125	0.488	0.208
Residual Std. Error	0.707	1.070	0.701	1.144	1.211	1.151	0.942	1.608
	(df = 92)	(df = 92)	(df = 89)	(df = 92)	(df = 92)	(df = 89)	(df = 95)	(df = 95)
F Statistic	27.225***	1.524	17.866***	4.062***	1.641	2.727***	47.244***	13.746***
	(df = 5; 92)	(df = 5; 92)	(df = 8; 89)	(df = 5; 92)	(df = 5; 92)	(df = 8; 89)	(df = 2; 95)	(df = 2; 95)

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.35: Firefox and Chrome

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	0.050	−0.055	0.053	−0.398	−0.497	−0.404		
	(0.230)	(0.306)	(0.231)	(0.317)	(0.361)	(0.319)		
Rational appeal	0.054	0.351	0.042	−0.646**	−0.357	−0.622**		
	(0.221)	(0.293)	(0.225)	(0.305)	(0.345)	(0.310)		
Utilitarian	0.817***		0.837***	0.758***		0.717***		
	(0.099)		(0.116)	(0.137)		(0.160)		
Hedonic		0.330***	−0.033		0.379***	0.068		
		(0.112)	(0.098)		(0.132)	(0.135)		
Attitude towards the website							0.280***	0.372*
							(0.098)	(0.206)
Perceived usefulness							0.792***	0.815***
							(0.115)	(0.242)
Constant	0.756	2.889***	0.836	1.650**	3.246***	1.489*	−0.635	−1.254
	(0.503)	(0.636)	(0.558)	(0.694)	(0.750)	(0.770)	(0.581)	(1.225)
Observations	71	71	71	71	71	71	71	71
R^2	0.517	0.139	0.518	0.333	0.134	0.335	0.551	0.249
Adjusted R^2	0.495	0.100	0.489	0.303	0.095	0.295	0.537	0.227
Residual Std. Error	0.711	0.949	0.716	0.982	1.118	0.987	0.887	1.871
	(df = 67)	(df = 67)	(df = 66)	(df = 67)	(df = 67)	(df = 66)	(df = 68)	(df = 68)
F Statistic	23.899***	3.592**	17.717***	11.137***	3.451**	8.321***	41.675***	11.272***
	(df = 3; 67)	(df = 3; 67)	(df = 4; 66)	(df = 3; 67)	(df = 3; 67)	(df = 4; 66)	(df = 2; 68)	(df = 2; 68)

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.36: Firefox and Chrome

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	−1.497	−1.120	−1.242	−1.491	−2.295	−2.145		
	(1.154)	(1.673)	(1.383)	(1.606)	(1.910)	(1.899)		
Rational appeal	−0.873	−0.431	−1.278	−0.430	1.464	0.311		
	(1.232)	(1.420)	(1.343)	(1.716)	(1.621)	(1.844)		
Utilitarian	0.636***		0.700***	0.686***		0.567*		
	(0.175)		(0.207)	(0.244)		(0.285)		
Emotional appeal:Utilitarian	0.329		0.362	0.234		0.142		
	(0.241)		(0.288)	(0.335)		(0.395)		
Rational appeal:Utilitarian	0.194		0.065	−0.039		0.197		
	(0.248)		(0.292)	(0.345)		(0.400)		
Hedonic		0.213	−0.108		0.461*	0.201		
		(0.208)	(0.182)		(0.237)	(0.251)		
Emotional appeal:Hedonic		0.201	−0.074		0.338	0.200		
		(0.310)	(0.275)		(0.354)	(0.377)		
Rational appeal:Hedonic		0.149	0.200		−0.353	−0.363		
		(0.266)	(0.232)		(0.304)	(0.319)		
Attitude towards the website							0.280***	0.372*
							(0.098)	(0.206)
Perceived usefulness							0.792***	0.815***
							(0.115)	(0.242)
Constant	1.614*	3.511***	1.882*	1.991*	2.811**	1.493	−0.635	−1.254
	(0.850)	(1.125)	(0.971)	(1.184)	(1.284)	(1.333)	(0.581)	(1.225)
Observations	71	71	71	71	71	71	71	71
R^2	0.531	0.145	0.542	0.341	0.193	0.374	0.551	0.249
Adjusted R^2	0.494	0.079	0.483	0.290	0.130	0.294	0.537	0.227
Residual Std. Error	0.712	0.960	0.720	0.991	1.096	0.988	0.887	1.871
	(df = 65)	(df = 65)	(df = 62)	(df = 65)	(df = 65)	(df = 62)	(df = 68)	(df = 68)
F Statistic	14.690***	2.204*	9.168***	6.719***	3.099**	4.639***	41.675***	11.272***
F Statistic	(df = 5; 65)	(df = 5; 65)	(df = 8; 62)	(df = 5; 65)	(df = 5; 65)	(df = 8; 62)	(df = 2; 68)	(df = 2; 68)

Note: *p<0.1; **p<0.05; ***p<0.01

G.11 Results for those who did see the product

Table G.37

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	0.204	−0.042	0.205	0.710	0.546	0.760*		
	(0.302)	(0.381)	(0.318)	(0.423)	(0.472)	(0.444)		
Rational appeal	−0.048	0.073	−0.048	0.227	0.341	0.237		
	(0.342)	(0.422)	(0.348)	(0.479)	(0.523)	(0.486)		
Utilitarian	0.900***		0.902***	0.698***		0.779**		
	(0.164)		(0.216)	(0.229)		(0.301)		
Hedonic		0.491***	−0.002		0.316	−0.110		
		(0.174)	(0.185)		(0.215)	(0.258)		
Attitude towards the website							0.220*	−0.431
							(0.118)	(0.312)
Perceived usefulness							0.789***	0.639*
							(0.139)	(0.367)
Constant	0.021	2.098**	0.024	0.625	2.566**	0.773	0.357	3.283*
	(0.868)	(0.939)	(0.916)	(1.216)	(1.162)	(1.279)	(0.619)	(1.633)
Observations	38	38	38	38	38	38	38	38
R^2	0.475	0.196	0.475	0.259	0.113	0.263	0.641	0.088
Adjusted R^2	0.428	0.125	0.411	0.193	0.035	0.173	0.620	0.036
Residual Std. Error	0.791	0.978	0.803	1.107	1.211	1.121	0.763	2.014
	(df = 34)	(df = 34)	(df = 33)	(df = 34)	(df = 34)	(df = 33)	(df = 35)	(df = 35)
F Statistic	10.239***	2.767*	7.454***	3.956**	1.445	2.940**	31.182***	1.683
	(df = 3; 34)	(df = 3; 34)	(df = 4; 33)	(df = 3; 34)	(df = 3; 34)	(df = 4; 33)	(df = 2; 35)	(df = 2; 35)

Note: *p<0.1; **p<0.05; ***p<0.01

Table G.38

	Dependent variable:							
	Perceived usefulness			Attitude towards the website			Net Promoter Score	Purchase Probability
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Emotional appeal	1.128	−4.040*	−0.884	2.730	−1.878	1.181		
	(1.945)	(2.215)	(2.016)	(2.729)	(2.883)	(3.037)		
Rational appeal	−1.216	−3.219	−1.863	1.390	−1.186	0.695		
	(2.440)	(2.286)	(2.389)	(3.423)	(2.976)	(3.600)		
Utilitarian	0.919***		1.101***	0.872**		1.049**		
	(0.241)		(0.263)	(0.339)		(0.396)		
Emotional appeal:Utilitarian	−0.182		−0.989*	−0.397		−0.986		
	(0.377)		(0.485)	(0.529)		(0.731)		
Rational appeal:Utilitarian	0.214		−0.081	−0.224		−0.389		
	(0.453)		(0.730)	(0.635)		(1.100)		
Hedonic		0.139	−0.317		0.124	−0.310		
		(0.241)	(0.223)		(0.314)	(0.337)		
Emotional appeal:Hedonic		0.744*	1.121**		0.450	0.839		
		(0.403)	(0.446)		(0.524)	(0.673)		
Rational appeal:Hedonic		0.623	0.420		0.291	0.298		
		(0.420)	(0.566)		(0.546)	(0.853)		
Attitude towards the website							0.220*	−0.431
							(0.118)	(0.312)
Perceived usefulness							0.789***	0.639*
							(0.139)	(0.367)
Constant	−0.080	3.911***	0.623	−0.267	3.556**	0.421	0.357	3.283*
	(1.257)	(1.272)	(1.294)	(1.764)	(1.655)	(1.950)	(0.619)	(1.633)
Observations	38	38	38	38	38	38	38	38
R^2	0.486	0.290	0.579	0.272	0.135	0.312	0.641	0.088
Adjusted R^2	0.405	0.179	0.462	0.158	−0.0005	0.122	0.620	0.036
Residual Std. Error	0.807	0.948	0.767	1.131	1.233	1.156	0.763	2.014
	(df = 32)	(df = 32)	(df = 29)	(df = 32)	(df = 32)	(df = 29)	(df = 35)	(df = 35)
F Statistic	6.046***	2.615**	4.976***	2.388*	0.996	1.640	31.182***	1.683
	(df = 5; 32)	(df = 5; 32)	(df = 8; 29)	(df = 5; 32)	(df = 5; 32)	(df = 8; 29)	(df = 2; 35)	(df = 2; 35)

Note: *p<0.1; **p<0.05; ***p<0.01

Appendix H

Reliability related regression tables

Table H.1: Results of factor loadings without the bad loading construct questions

	Standardized loadings						
	Factor1	Factor2	Factor3	Factor4	Factor5	Factor6	u
Att_beauty				-0.912			0.131
Att_good	-0.117			0.683		0.127	0.470
Att_liked				0.671	0.288		0.318
Useful_easeofuse		0.652			0.209		0.326
Useful_effective		0.700			0.225		0.247
Useful_faster		0.793					0.272
Useful_jobperf		0.852					0.256
Useful_producti		0.797					0.320
NPS1						0.971	0.005
NPS2			0.119		0.120	0.631	0.257
PP1			0.958				0.075
PP2			1.007				0.008
HED_inspirerend	0.846						0.259
HED_Leuk	0.862						0.257
HED_Opwindend	0.952					-0.115	0.132
HED_Spnnend	0.807				0.131		0.235
UT_Effectief					0.603	0.167	0.413
UT_Functioneel					0.769	0.110	0.188
UT_Nuttig		0.199		0.134	0.650		0.236
UT_Praktisch		0.251		0.150	0.382		0.481

Note: Used factanal(x, factors=6, rotation = "oblimin", scores = "Bartlett") in R

Table H.2: Regression results when run with factor scores and without bad performing questions. The cells that are marked grey represent differences with the main results.

	Dependent variable:							
	Attitude towards the website			Perceived usefulness			factorscore6nps_min	factorscore3pp_min
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Hedonic	0.047	0.123*		−0.044	−0.167**			
	(0.072)	(0.072)		(0.065)	(0.071)			
Utilitarian	−0.280***		−0.291***	0.452***		0.463***		
	(0.069)		(0.066)	(0.062)		(0.060)		
Emotional appeal	−0.163	−0.138	−0.170	0.288*	0.248	0.294*		
	(0.183)	(0.190)	(0.182)	(0.167)	(0.186)	(0.166)		
Rational appeal	−0.205	−0.273	−0.192	0.221	0.332*	0.208		
	(0.173)	(0.179)	(0.172)	(0.158)	(0.176)	(0.156)		
Perceived usefulness							0.523***	0.434***
							(0.052)	(0.064)
Attitude towards the website							−0.248***	0.0002
							(0.052)	(0.063)
Constant	0.132	0.152	0.129	−0.177	−0.209	−0.174	−0.000	0.000
	(0.131)	(0.136)	(0.130)	(0.119)	(0.133)	(0.119)	(0.051)	(0.063)
Observations	206	206	206	206	206	206	206	206
R^2	0.098	0.023	0.096	0.240	0.042	0.238	0.465	0.205
Adjusted R^2	0.080	0.009	0.083	0.225	0.028	0.227	0.460	0.197
Residual Std. Error	1.012	1.050	1.010	0.922	1.032	0.920	0.737	0.899
	(df = 201)	(df = 202)	(df = 202)	(df = 201)	(df = 202)	(df = 202)	(df = 203)	(df = 203)
F Statistic	5.457***	1.604	7.157***	15.876***	2.938**	21.073***	88.237***	26.097***
	(df = 4; 201)	(df = 3; 202)	(df = 3; 202)	(df = 4; 201)	(df = 3; 202)	(df = 3; 202)	(df = 2; 203)	(df = 2; 203)

Note: *p<0.1; **p<0.05; ***p<0.01

Table H.3: Interaction Regression results when run with factor scores and without bad performing questions. The cells that are marked grey represent differences with the main results.

	Dependent variable:					
	Attitude towards the website			Perceived usefulness		
	(1)	(2)	(3)	(4)	(5)	(6)
Hedonic	0.216	0.302**		0.091	−0.064	
	(0.139)	(0.138)		(0.128)	(0.137)	
Utilitarian	−0.268**		−0.322***	0.479***		0.456***
	(0.122)		(0.118)	(0.113)		(0.108)
Emotional appeal	−0.155	−0.099	−0.192	0.254	0.197	0.310*
	(0.184)	(0.188)	(0.182)	(0.170)	(0.188)	(0.167)
Rational appeal	−0.193	−0.246	−0.205	0.216	0.316*	0.216
	(0.171)	(0.176)	(0.171)	(0.158)	(0.175)	(0.157)
Hedonic:Emotional appeal	0.014	0.082		−0.314	−0.350*	
	(0.207)	(0.202)		(0.191)	(0.202)	
Hedonic:Rational appeal	−0.342**	−0.388**		−0.120	−0.047	
	(0.170)	(0.170)		(0.157)	(0.169)	
Utilitarian:Emotional appeal	−0.158		−0.184	0.046		0.146
	(0.194)		(0.184)	(0.179)		(0.169)
Utilitarian:Rational appeal	0.069		0.148	−0.081		−0.052
	(0.156)		(0.152)	(0.144)		(0.139)
Constant	0.142	0.162	0.128	−0.168	−0.204	−0.174
	(0.129)	(0.133)	(0.130)	(0.119)	(0.133)	(0.119)
Observations	206	206	206	206	206	206
R^2	0.141	0.066	0.113	0.256	0.059	0.244
Adjusted R^2	0.106	0.043	0.091	0.226	0.036	0.226
Residual Std. Error	0.997	1.032	1.006	0.921	1.028	0.921
	(df = 197)	(df = 200)	(df = 200)	(df = 197)	(df = 200)	(df = 200)
F Statistic	4.037***	2.848**	5.109***	8.477***	2.514**	12.944***
	(df = 8; 197)	(df = 5; 200)	(df = 5; 200)	(df = 8; 197)	(df = 5; 200)	(df = 5; 200)
Note:						*p<0.1; **p<0.05; ***p<0.01

Table H.4: Cronbach Alpha for the train and test set

	Internal consistency:			
	Train dataset		Test dataset	
	Raw alpha	Std alpha	Raw alpha	Std alpha
Utilitarian	0.87	0.87	0.85	.86
if item dropped:				
UT_Effectief	0.84	0.84	0.83	0.83
UT_Functioneel	0.81	0.82	0.80	0.81
UT_Noodzakelijk	0.90	0.90	0.83	0.84
UT_Nuttig	0.81	0.81	0.79	0.80
UT_Praktisch	0.83	0.84	0.85	0.85
Hedonic	0.88	0.87	0.90	0.90
if item dropped:				
HED_inspirerend	0.83	0.82	0.86	0.86
HED_Leuk	0.82	0.81	0.87	0.86
HED_Plezierig	0.92	0.93	0.93	0.93
HED_Opwindend	0.82	0.81	0.87	0.87
HED_Spannend	0.83	0.82	0.85	0.84
Usefulness	0.91	0.91	0.94	0.94
if item dropped:				
Useful_easeofuse	0.89	0.89	0.93	0.93
Useful_effective	0.89	0.89	0.93	0.93
Useful_faster	0.90	0.90	0.93	0.93
Useful_jobperf	0.90	0.89	0.93	0.93
Useful_producti	0.90	0.90	0.93	0.93
Useful_useful	0.91	0.91	0.94	0.94
Attitude	0.84	0.85	0.82	0.83
if item dropped:				
Att_beauty	0.70	0.70	0.69	0.71
Att_good	0.86	0.86	0.78	0.78
Att_liked	0.79	0.79	0.79	0.80