Consumer Attitudes Toward Mobile Advertising
A Study of the Dutch Youth

Master’s thesis within Business Administration

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ABSTRACT

Purpose: To study the Dutch youth’s perceptions on and attitudes toward mobile advertising.

Background: Consumers are living within a media saturated environment, which limits the effectiveness of advertising. This has led to advertising clutter, most prevalent in traditional mass media. The advertising clutter has resulted in marketers moving their advertising focus toward less cluttered mediums, such as mobile advertising. Mobile advertising allows companies to specifically target the right consumers by looking at age, gender and geographic regions etc. Being able to advertise to such a specified target group is an advantage for companies, however the question remaining is how consumers perceive this form of specific targeting advertising.

Method: In this research the deductive approach has been implemented in order to answer the research questions. Both qualitative and quantitative data has been collected through a questionnaire and focus group. The statements used in the questionnaire are based on previous studies and theories. The data retrieved through the questionnaire has been analysed using SPSS.

Conclusion: The results of this study showed the Dutch youth mainly sees the originality, interactivity and entertainment levels of mobile advertising as positive in comparison to traditional forms of advertising. Furthermore, message content was shown to be an important factor in order for the consumer to perceive the advertising as positive. The main aggravating attributes that come with mobile advertising are the perceived risks, like receiving too many advertising messages. Furthermore it was found that the more positive the attitude toward advertising in general is, and the more the consumer likes searching for product information, the more positive the attitude toward mobile advertising will be. The main purpose of this research was to find out what the attitudes of the Dutch youth are toward mobile advertising. The statistical results showed a negative attitude toward mobile advertising. However, the qualitative results showed that when mobile advertising is used in a proper way, consumers’ attitudes can be positive.
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1 INTRODUCTION

This chapter will be dedicated to finding background information to the purpose of the thesis, and the research phenomena. The aim of this thesis is to discover the consumers’ attitudes towards mobile advertising, when focussing on the youth within the Netherlands.

1.1 Background

According to Goldman & Papsan (1996), the cultural landscape of contemporary life has witnessed a marked increase in advertising. ‘This daily regimen of advertising messages may exceed the information-processing abilities of most consumers, requiring them to filter out excess visual and aural marketing stimuli (much of which consists of messages targeted at different demographic and psychographic groups)’ (Rumbo, 2002). Consumers are living within a media saturated environment, with mass media estimated to occupy 70% of a consumer’s day, thus limiting the effectiveness of advertising. This has led to advertising clutter, most prevalent in traditional mass media (Newell & Meier, 2007). Clutter causes less audience attention while increasing viewer confusion (Elliott & Speck, 1998). This makes it a challenge for every company to get through this clutter in order to reach the customer. A common communication strategy to break through this competitive clutter is to increase ad originality (Pieters et al, 2002).

The advertising clutter has resulted in marketers moving their advertising focus toward less cluttered mediums, such as mobile advertising (Newell & Meier, 2007). Mobile advertising is touted as a means to cut through the clutter and interact directly with the consumer. Hence, with the trend toward direct, one-to-one marketing (Leppäniemi & Karjaluoto, 2005). Bamba & Barnes (2007) describe mobile marketing as ‘using a wireless medium to provide consumers with time-and-location-sensitive, personalized information that promotes goods, services and ideas, thereby benefiting all stakeholders’.

Mobile advertising allows companies to specifically target the right consumers by looking at age, gender and geographic regions etc. Being able to advertise to such a specified target group is an advantage for companies, however the question remaining is how consumers perceive this form of specific targeting advertising. This thesis focuses on giving an overview of consumers’ attitudes toward mobile advertising looking at the different aspects of this new marketing phenomenon.

It is necessary to explore new and innovative means to communicate with consumers (Newell & Meier, 2007). After a tough year 2009, advertisers are expected to increase mobile and digital marketing budgets over the next years. With this in mind, it is essential that advertisers keep up to date with their options in the mobile environment.

Due to the high reach of mobile phones, their low cost and high retention rates, expectations are high that this industry will succeed (Kondo et al, 2008). Special features of the mobile channel include its mobility, reachability, direct marketing capabilities, interactivity, two-way communication, branding opportunities, viral-marketing potential, timeliness and personalisation, the possibilities of this communication channel are immense (Karjaluato et al, 2007). There are 5
main forms of advertising shown in figure 1: SMS, Rich Media, Mobile applications, Geo-
location, and Growth of Mobile Video (Swallow, 2010).

Figure 1. Forms of Mobile Advertising

**SMS/MMS**
One major form of mobile advertising is through SMS text messages, which is the only offline
form of advertising. The most important reason to advertise via SMS is the high reading-ratio, about 99% of the text messages are read by the recipient and 90% of the text messages sent, are read within three minutes after delivery. The SMS possesses the benefits of being immediate, customized, automated, direct, reliable, personal, and discreet as well being a direct call to action that is far more impressive than any other channel (Kondo et al, 2008).

**Rich Media**
A rather new form of mobile advertising, which companies are still experimenting with, is Rich
Media. According to the CEO of Medialets, ‘Rich Media advertisements offer more in-application interactivity via video, sound, gaming, and so on’. With the growing adoption of smartphones as the device of choice, rich media is the natural progression towards more engaging advertisements.

**Mobile Applications**
Another option companies could choose to advertise through is the mobile website, applications
or a combination of both. The most crucial part of this type of advertising is the presentation of
the advertisement.

**Geo- location**
The location of the customer can be used as a base of the advertising. Depending on whether a
customer is near a store of the company, a message/advertisement of that company will be send
to that passenger. This is a useful tool of advertising for marketers, as it gives them the opportunity to create a targeted advertisement.

**Mobile Video**
The last form is a still upcoming form of mobile advertising, through mobile videos. As this form of advertising is not used that much yet, it will be difficult to gain knowledge about the consumer attitudes toward this specific advertisement form. (E. Swallow, 2010).

Another way of marketing towards consumers with a mobile device is with the use of QR codes, which stands for Quick Respond codes. The codes are mostly incorporated into advertisements, where the respondents have the choice to scan the QR code and gain more knowledge about the product/service, or not. As the consumer makes the choice of finding information, rather than the information being pushed toward the consumers, this method is not considered as a communication tool within this research.

Within this research, the focus lays on exploring the perception of consumers on mobile advertising. The research will be based on Dutch consumers, since the origin of the writers is Dutch, accompanied with the other following reasons:

In 2010, with an amount of 90%, the Netherlands had the largest amount of internet accesses per household. Compared to other European countries, they were also ranked first with 84%, concerning the amount of broadband internet accesses per household (CBS², 2011). Another interesting fact is that out of the whole population, 84% of the Dutch internet users, use the internet on a daily basis (CBS², 2011). With this information, it can be concluded that the Dutch environment is open towards internet, and highly adapted to the technical developments concerning the internet.

The Netherlands counted 6 million mobile internet users in the spring of 2011. According to Table 1, from the total amount of internet users, exactly 50% uses the internet with a mobile device, 42% were internet users via smartphones (CBS¹, 2011).

The increase of the mobile internet users has mainly been emerging with the introduction of smartphones. Smartphones are mostly used by the youth belonging to the age group of 15-29 years (Telecompaper, 2011).

In the Netherlands there are about 2.8 million youngsters (CBS, 2012). The population for this research consists of all Dutch youngsters in possession of a smartphone. Recent research found that 60% of the Dutch youth, in the age group of 15-29, use a smartphone (Mediawijzer, 2011).
In the article published on the Local (2011), it is however mentioned that the youth of today prefer to spend their time on real books, TV and radio rather than going on the internet. In the age-group of 15-24, 60% did not list the internet as a media preference. The internet was mostly used for the purpose of listening to music, videos and social networking. The article describes the internet as a complement rather than a competitor to older media outlets.

1.2 Purpose

The specific purpose of this research is to study the Dutch youth’s perceptions on and attitudes toward mobile advertising. This country has been chosen because of its high use and adaptation concerning the technical developments of the internet.

With use of the research findings recommendations can be made toward companies on how and when to use mobile advertising and how to improve their current use of mobile advertising.
1.3 Research Questions

MAIN RESEARCH QUESTION:

What is the Dutch youth’s attitude toward mobile advertising?

SUBQUESTIONS:

- What attributes in mobile advertising do consumers perceive as valuable?
- What attributes in mobile advertising do consumers perceive as aggravating?
- How do consumer-based acceptance drivers influence the Dutch youth’s attitude toward mobile advertising?
- Is there a difference in age and/or gender, considering perceptions toward mobile advertising?

1.4 Key Terms

Advertising: Any paid form of non-personal presentation and promotion of ideas, goods or services by an identified sponsor (Kotler, Wong, Saunders & Armstrong, 2005, p. 761).

Attitude: A lasting general evaluation of people (including oneself), objects or issues (Solomon, Bamossy, Askegaard, & Hoog, 2010, p. 643). Or, a learned predisposition to respond in a consistently favourable or unfavourable manner with respect to a given object (Ajzen & Fishbein, 1975, p. 6).

Behaviour: A consumer’s actions with regard to an attitude object (Solomon et al, 2010, p. 643).

Branding: A marketing strategy that often functions as a heuristic. People form preferences for a favourite brand, and then they literally may never change their minds in the course of a lifetime (Solomon et al, 2006, p. 287).

Clutter: Over-abundance of advertising stimuli (Solomon et al, 2006, p. 47).

Demographic: Statistics that measure a population’s characteristics. Some of the most important of these relate to family structure, e.g. the birth rate, the marriage rate and the divorce rate (Solomon et al, 2006, p. 420).

Incentives: Are generally referred to as a sales - promotions, and when defined in this way involve some direct purchasing incentive that is offered for making a specific purchase or talking a specific purchase-relation action (Percy & Elliott, 2009).

Marketing: An organizational function and set of processes for creating, communicating and delivering values to customers and for managing customer relationships in ways that benefit the organization and its stakeholders (Gundlach, 2007 p. 243).

Marketing stimuli: Have important sensory qualities such as colours, odours, sounds, tastes and the ‘feel’ of products (Solomon et al, 2006, p. 56)
**Mobile advertising:** The selling of goods and services through wireless handheld devices such as mobile phones (Gay et al, 2007).

**One-to-one marketing:** it is centered on the belief that, to be effective, one must make an emotional connection with people, and this connection is made one person at a time, even in mass media (Komenar, 1997).

**Psychographic:** The description of consumers based mainly on such psychological and social psychological factors as values, beliefs and attitudes, and is used to explain why these consumers have a propensity to consume certain products or brands, use certain services, devote time to certain activities and use certain media (Solomon et al, 2006, p 562).

**Spam:** Unsolicited electronic direct mail (Lusch et al, 2011).

**Two-way communication:** can involve face-to-face contacts, telephone calls, postal or electronic communications (Bennett & Barkensjo, 2004).

**Viral marketing:** Refers to the strategy of getting customers to sell a product on behalf of the company that creates it (Solomon et al, 2006, p. 370).

### 1.5 Delimitations

The respondents that are taken under consideration in this research are all Dutch consumers between the age of 15 and 29 whom are in possession of a smart phone. With the research being conducted at Jönköping University it was decided to conduct the focus groups with Dutch students studying at Jönköping University. Even though this decreases the representability of the focus group, as it limits the age range and it is not possible to have respondents from all over the country, this was the best option given the time range available.

Another delimitation was that all participants in the focus groups were international students and therefore may be different from the average Dutch youth. This may cause biased opinions. Also, all respondents knew each other. On one hand this is positive, since all respondents were comfortable among each other. On the other hand, being familiar with each other might mean the respondents share the same opinions or influence each other’s opinions more heavily.
2 FRAME OF REFERENCE

This chapter gives more information on previous research on consumer attitudes toward advertising in general and consumer attitudes toward mobile advertising specifically. Furthermore an explanation of the model to be used in the research is provided.

2.1 Consumer Attitudes Toward Advertising

With mobile advertising being a relatively new marketing phenomenon, most consumers will not have formed a stable attitude to this form of advertising yet. However, Bauer et al (2005) have shown that a consumer’s attitude toward advertising in general impacts that consumer’s attitude toward mobile advertising. Consumers are likely to be highly familiar with advertising in general, as they are exposed to it on an everyday basis. Therefore they can be expected to hold a stable and consistent attitude toward advertising in general (Bauer et al, 2005). In order to get a better overview on consumer attitudes toward mobile advertising, first an overview on consumer attitudes toward advertising in general is provided.

A consumer’s attitude toward an advertisement is an important influence on advertising effectiveness, brand attitudes, and purchase intentions (MacKenzie & Lutz, 1989). A consumer who enjoyed a particular advertisement is likely to hold a favourable attitude toward the brand advertised (Sicillia, Ruiz & Reynolds, 2006).

The dimensions influencing a consumer’s attitude toward the advertisement differ per sort of advertising:

- In printed advertising, the colours used and the quality of the photography positively influence the consumer’s attitude toward the advertisement (Lohse & Rosen, 2001).
- When using online advertising, interactivity tends to positively influence a consumer’s attitude toward the advertisement as it promotes the formation of mental imagery (Schlosser, 2003).
- Marketers advertising through television mainly have to deal with the problem of consumers paying very little attention to this sort of advertising (Heath & Stipp, 2011).

However, Heath & Stipp (2011) claim that emotion is better communicated when less attention is paid, because low attention inhibits counter-argument. Therefore low attention processing will tend to favour advertisements designed to exert emotional influence. Furthermore, Heath & Stipp (2011) argue the effect of wear-out in television advertising when showing an advertisement too often. They say when advertisements are processed in a shallow fashion, affective responses are enhanced, and there is no evidence of a downturn after repetition. Therefore the viewers’ behaviour of paying less attention to advertising they like and have seen before is likely not only to increase their emotive influence but to greatly extend their acceptability.

Nowadays however, marketers have to keep in mind the problem of advertising clutter in the traditional advertising channels. This daily regimen of advertising messages may exceed the
information-processing abilities of most consumers, requiring them to filter out excess visual and aural marketing stimuli (Rumbo, 2002).

However, Shavitt et al (1998) found that consumers actually tend to have quite positive attitudes toward advertising. Consumers tend to enjoy advertisements they see, and they tend to find advertising generally informative and useful in guiding their own decision making.

Even though they do not generally trust advertising, consumers tend to feel more confident in advertising claims when focused on their actual purchase decisions. This overall positive attitude is mostly shared among males, younger consumers, persons with less education and income, and non-whites than others do (Shavitt et al, 1998). This research showed that people’s feelings of enjoyment elicited by advertisements played the strongest role in accounting for their overall attitudes toward advertising, showing entertainment to be an important dimension in consumer attitudes toward advertising.

2.2 Consumer Attitudes Toward Mobile Advertising

Mobile Marketing refers to marketing activities that deliver advertisements to mobile devices using a wireless network and mobile advertising solutions to promote the sales of goods and services, or build brand awareness (Yunos & Gao, 2002). Furthermore, mobile advertising provides consumers with time- and location-sensitive, personalized information that promotes products, services and ideas, thereby benefiting all stakeholders (Scharl et al, 2005). According to Yuan and Cheng (2004), mobile marketing has become increasingly popular because the mobile phone is a personal device used in marketing.

Mobile marketing is the new way to access people, communities and interested groups. With the penetration rate of mobile phones growing fast, in 2010 there was a global penetration rate for mobile subscriptions of 76% (ITU, 2010), the advertising industry is becoming increasingly interested in using the mobile phone as a medium for communicating commercial content (Silberer & Wolhfart, 2001).

There are various types of mobile marketing available to marketers. As mentioned earlier in the background, there are 5 main forms of advertising through a mobile device (Swallow, 2010): sms/mms, Rich media, mobile applications, geo-location, and mobile video. Another way of advertising through mobile devices is with the use of QR codes, however this is a technique requiring the consumer to act when interested in an advertisement.

When looking at mobile advertising acceptance, a distinction can be made between permission-based mobile advertising and regular mobile advertising. Mir (2011) showed that users of mobile marketing services, after advertisers getting their permission, tend to have a more positive attitude toward the advertisement. In permission based advertising, product and service specific content is communicated only to agreed individuals (Tsang et al, 2004). Unsolicited messages (spam) irritate mobile users and are considered illegal in some countries (Tripathi & Siddiqui, 2008). In permission marketing consumers give their approval to receive marketing information (Godin, 1999).
Successful permission marketing is about building long-term relationships with customers once the initial permission is granted. The consent, trust and two-way exchange of information help to develop the relationship between the consumer and the brand. The fact of consumers having a more positive attitude toward mobile advertising after agreeing upon receiving the advertisement is shown by the research conducted by Tsang et al (2004).

Next to having a more positive attitude toward the mobile advertisement after agreeing upon receiving such advertisements, consumers were also found to be more likely to read the messages in full and they tended to read them immediately, whereas those consumers who did not give permission to companies to send out mobile advertisements tended to ignore and not read the received messages. According to Tsang et al (2004) mobile advertisements were mostly rated as negative because consumers found the advertisements irritating, given the personal and intimate nature of mobile phones.

When looking at the above shown differences between general and permission-based mobile marketing, it can be said in order for a company to launch a successful mobile marketing campaign, it is important to first have the consumers’ consent for sending the messages.

Message content is critical in implementing a successful mobile advertising campaign. Similar to other media, content is a key factor in attracting and retaining customers (Jin & Villegas, 2008). Mobile advertisers need to develop creative and concise advertising messages containing relevant content in order to attract the potential mobile users. Consent is a driving force in creating a service that attracts and sustains the users (Paavilainen, 2002). Relevant content is king in mobile advertising, as irrelevant advertisements may have least impact on target mobile users (Duchniky & Kolers, 1983). The wording used in the mobile advertising messages should be creative or appealing.

Advertising that satisfies consumers’ need for aesthetics, pleasure and an emotional experience can be assumed to be positively evaluated and accepted by consumers (van der Waldt et al, 2009). According to Haghirian et al (2005), a positive relationship exists between the entertainment factor of a mobile advertisement and the perceived value of the advertisement. It should be borne in mind that the golden rule of advertising content is king, is only one of the elements needed to drive a successful mobile advertising campaign.

According to Bamba & Barnes (2007), consumers agreed that advertisements should be send at specific hours, according to consumers’ activities. Reaching consumers at the right time and place means a minimum perceived effort for the consumer to buy the advertised product (Drossos et al, 2007). However, some challenges arise with sending out advertising considering time and consumers’ individual schedules. Time preferences differ for all consumers, making it a challenge to identify the optimal time of delivery for certain advertisements (Beneke et al, 2010).

The availability of time and location information as well as the personal nature of mobile phones allows for highly personalised advertising and a clear focus on the target market (Vatanparast & Asil, 2007). Personalization not only benefits the advertiser, but also the consumer, as it adds value and decreases perceived risk. This is important as consumers’ attitudes toward mobile


advertising are significantly influenced by the value that they attain from the advertisement (Vatanparast & Asil, 2007).

Interactivity is one of the most stated benefits of mobile advertising. Interactivity is generated through applications on the mobile device which facilitate two-way communication between the marketer and the potential customer (Vatanparast & Asil, 2007). A consumer has a higher probability of acting upon an advertisement with an embedded interaction response application than one which must be remembered, retrieved and acted upon later (Beneke et al, 2010).

In general consumers have been found to have a negative attitude toward mobile advertising (Drossos et al, 2007) as they associate mobile advertising with unsolicited messages and an invasion of privacy (Leppaniemi & Karjaluoto, 2005).

### 2.3 A Model of Consumer Acceptance for Mobile Marketing

The model used in this thesis, which is shown in figure 2, has been constructed by Bauer et al (2005) in order to explain consumers’ attitudes toward mobile advertising: a model of consumer acceptance for mobile advertising. According to this model, a consumer’s attitude toward mobile advertising is influenced by their innovativeness and current knowledge of this marketing phenomenon, whether the consumer is an information seeker and its attitude toward advertising in general, the perceived utility and risk of mobile advertising, social norms, and its behavioural intention. Within this model, the perceived utility regards three different dimensions, the perceived information within the advertisement, the perceived entertainment level of the advertisement, and the perceived social utility of the advertisement.

![Figure 2. Consumer Attitude Toward Mobile Advertising (Bauer et al, 2005)](image-url)
All the different factors influencing the consumers’ acceptance of mobile marketing in the Bauer et al (2005) model will be explained:

**Consumer-Based Acceptance Drivers**

**Innovativeness**

“Actual innovativeness” refers to the actual adoption of a specific innovation by a particular individual. Consumers characterized by a high degree of innovativeness are usually very open to new experiences and tend “to make constructive use of information received” (Leavitt & Walton, 1975). Considering the high advertising investments of the telecommunications industry as well as the strong media presence of topics related to mobile communications, individuals with a high level of innovativeness are likely to receive a large amount of information on mobile communications (Peter & Olson, 2002).

**Existing Knowledge**

A central psychological determinant of consumers’ behaviour is an individual’s knowledge. Existing knowledge affects the cognitive processes related to consumers’ decisions and is thus also an important determinant of the acceptance decisions. A consumer’s existing knowledge determines his ability to understand the features and usage of an innovation. Existing knowledge thus affects the consumer’s perceptions of the innovation’s complexity (Moreau et al, 2001).

→The innovation is perceived to be less complex if the consumer already possesses a certain amount of knowledge about the innovation itself or about a product similar to it (Sheth, 1968). The more familiar a consumer is with mobile communications in general the less difficult the use of mobile marketing services will appear to him.

**Information Seeker**

An individual’s propensity to search and use information is an important construct in the analysis and explanation of consumers’ behaviour (Kroeber-Riel & Weinberg, 2003). The personal relevance of advertising messages also depends on the individual’s propensity to receive information. It is plausible to assume that an individual’s propensity to search and use information partly determines his attitude toward mobile advertising.

**Attitude Toward Advertising**

The theory of cognitive dissonance developed by Festinger (1978) uses one of the most important theoretical concepts in explaining the integration of a single attitude into an individual’s attitudinal system. The theory is based on the assumption that an individual is always aiming to keep his cognitive system in balance. If inconsistencies between several cognitions (i.e. opinions, attitudes, or expectations) arise, consumers experience feelings of discomfort. To overcome this displeasing feeling, consumers try to reduce the inconsistencies between their cognitions. Frequent exposure to advertising creates familiarity with these advertisements, which keeps the attitude toward advertising of consumers stable and consistent. It therefore appears that the attitude toward mobile marketing will be highly dependent on the attitude toward advertising in general.
Raju (1980) found in his study that individuals displaying a strong tendency toward “exploratory behaviour” tend to exhibit a high propensity to search and use information. This implies that information seekers are fond of receiving advertising messages and have a positive attitude toward advertising in general.

Innovations-Based Acceptance Drivers

Perceived Utility (information, entertainment, and social)

Many authors claim that consumers will only accept mobile marketing if they perceive a benefit in receiving advertising messages on their mobile phone (Kavassalis et al., 2003). According to Kaas (1990), a consumer perceives the advertising stimuli if its marginal utility exceeds the marginal utility that results from using an additional time unit to engage in an alternative activity. This implies that consumers’ attitude toward mobile marketing will be more positive the higher they perceived the utility of this marketing service.

Another theoretical concept offering an explanation for the utility perception of mobile marketing as a prerequisite for its acceptance is the uses-and-gratification approach. According to this concept consumers consciously select and use certain media and contents to gratify specific needs. Katz et al. (1973) identify the following three categories of needs as being the most important: 1) “Needs related to strengthening information, knowledge and understanding” which is shown in the model as the perceived utility information, 2) “Needs related to strengthening aesthetic, pleasurable and emotional experience” mentioned in the model as perceived utility entertainment, and 3) “Needs related to strengthening contact with family friend, and the world” which can be found in the model under perceived utility social. The uses-and-gratification-approach implies that mobile marketing will only be accepted by consumers if perceived as an opportunity to gratify the needs for information, knowledge and social acceptance.

Perceived Risk

The risk associated with mobile marketing is mainly perceived as one of data security. New media services users tend to have concerns about data manipulation, unauthorized data access, and unwanted tracking of usage patterns. By using the mobile medium it is possible for marketers to reach consumers anytime and anywhere. This characteristic provides the basis for high-potential, personalized mobile marketing on one hand, but also accounts for consumers’ willingness to adopt mobile marketing as an innovation (Bauer et al., 2005).

Consumers’ behaviour is strongly influenced by perception of risk; consumers are usually uncertain about the consequences of a decision or an action (Bauer, 1976). Furthermore, it has been revealed that consumers try to minimize risk rather than maximize utility. A consumer’s subjective risk perception can thus strongly determine this behaviour (Mitchell, 1999). This is especially true for the adoption of innovations, a consumer’s lack of experience with the new product can cause consumers to find themselves in a situation of high risk. Consumers therefore try to reduce the risk associated with a certain behavioural decision. During an adoption decision this can result in the refusal of an innovation. The causal relationship between risk perception and attitude toward mobile marketing can be assumed as being negative.
Acceptance

Social Norms and Behavioural Intentions

Shimp & Kavas (1984) were able to approve a causal relationship between the subjective perception of social norms and the attitude toward the act. Attitude toward the act (Attitude toward Mobile Advertising) and the behavioural intention are additionally connected by a causal relationship such that attitude toward the act predicts behavioural intention. To identify and understand the determinants of the consumer’s acceptance of mobile marketing it is thus necessary to measure the factors determining the attitude toward mobile marketing. The factors that need to be measured consider: Innovativeness, existing knowledge, information seeker, attitude toward advertising, perceived utility information, perceived utility social, perceived utility entertainment, perceived risk, social norms, and the intentional behaviour factors.

→ Behaviour is determined by behavioural intention. The behavioural intention is in turn postulated to be a function of the individual's attitude toward the act and the social norms. Whether the attitude toward the act or the social norms exerts the greater influence on the behavioural intention depends on the individual and the decision object (Ajzen & Fishbein 1980).

This model and its dimensions are used for the survey design. Bauer et al (2005) have used a survey in order to find out the consumers’ attitude toward mobile advertising. The study was conducted in 2005 and their research sample had an average age of 31.5 years. In 2005 mobile advertising was such a new phenomenon that not enough consumers had been using this service for such a significant amount of time in order to allow the researchers to conclude on a stable attitude toward mobile advertising (Bauer et al, 2005).

With the research for this thesis conducted seven years later, the concept of mobile advertising has become more accepted by consumers. Furthermore, this research focuses on the Dutch youth, which are consumers between the age of 15 and 29. With these consumers having grown up with technology, they are likely to have more knowledge on technology and therefore a more stable attitude toward mobile advertising.

Bauer et al (2005) could not make assumptions about stable attitudes toward mobile advertising however, they were able to prove relationships between the dimensions influencing the attitude toward mobile advertising, making this an interesting model to work with when finding out certain consumers’ attitudes toward mobile advertising.

In the article is stated that all the dimensions have high enough Cronbach Alpha scores to be considered reliable. However, no relationship was found between consumers’ knowledge on mobile communications and their attitude toward mobile advertising, making this dimension less relevant in the model.

According to Bauer et al (2005), the main drivers of mobile advertising acceptance are the information and entertainment levels of the advertisements. “These results underline the importance of precisely embodying mobile marketing messages and campaigns according to consumer entertainment and information requirements. Only if mobile marketing messages are
designed creatively and are entertaining, or if they provide a high information value, will consumers develop a positive attitude towards mobile marketing leading to the behavioural intention to use mobile marketing services” Bauer et al (2005).

Furthermore, Bauer et al (2005) found all dimensions influencing consumer attitudes toward mobile advertising have a positive relationship, except for perceived risk. The results of the study show that risk perception in the context of mobile advertising mainly results from the fear of data misuse and the reception of unwanted mobile marketing messages. These results show that the establishment of a well-founded basis of trust is important for companies when wanting to succeed in mobile marketing.

2.4 Other Studies

Haghirian & Madlberger (2005) conducted research on consumer attitudes toward mobile advertising, focusing on Austrian consumers. As shown in figure 3, they constructed a model that shows a consumer’s attitude toward mobile advertising is influenced by (1) message content, (2) advertising value, (3) consumer demographics, and (4) frequency of exposure.

The results of the study of Haghirian & Madlberger (2005) showed that a consumer’s attitude toward mobile advertising mainly relates to the content of the advertising message. As said above, advertising content consists out of four dimensions. According to Haghirian & Madlberger (2005) the most important dimensions considering consumers’ attitudes toward mobile advertising are entertainment and informativeness. These results comply with the results of the study of Bauer et al (2005). The results of Haghirian & Madlberger (2005) also showed credibility to be an important factor concerning the attitudes of consumers. In this research credibility is
based on the extent to which consumers believe that the marketer has the expertise and honesty to perform a transaction effectively and reliably. The dimension credibility of Haghirian & Madlberger (2005) complies with the dimension concerning perceived risk of Bauer et al (2005). Haghirian & Madlberger (2005) also take consumer demographics into account when studying consumer attitudes toward mobile advertising, which Bauer et al (2005) do not. However, their findings show that demographics do not have any influence on the attitudes of consumers, except for the attitude toward privacy. Consumers who consider privacy very valuable are less likely to attribute a high value and a positive attitude toward advertising via mobile devices. Ackerman et al (2001) assume that consumers accept a certain degree of privacy loss if the benefit is considered being sufficient and satisfying. However, privacy concerns cannot be dismissed. A high frequency of exposure does not reflect either positively or negatively on consumers’ attitude toward advertising via mobile devices.

Another research studying the drivers of mobile advertising acceptance is the research conducted by Merisavo et al (2007). This research focused on Finnish consumers and evaluated five possible drivers: (1) utility, (2) context, (3) control, (4) sacrifice, and (5) trust. Their model can be seen in figure 4.

![Figure 4. A Conceptual Model for Consumer Acceptance of Mobile Advertising. (Merisavo et al, 2007)](image)

From their research they found the most important drivers to be the advertisement utility and context. These findings comply with the statement of Bauer et al (2005, p. 189): “Only if mobile marketing messages are designed creatively and are entertaining, or if they provide a high information value, will consumers develop a positive attitude towards mobile marketing leading to the behavioural intention to use mobile marketing services”.

Further research on mobile advertising was conducted by Mir (2011), who says mobile advertising is emerging as a new channel of marketing communication. Mir (2011) found that...
consumer attitudes toward mobile advertising tend to turn positive when the messages are sent after the consumer giving permission for sending the advertising messages. Furthermore, mobile users like receiving advertising messages that are customized to their profile. This research also showed that mobile users’ attitudes tend to be more positive when the advertising message is creative and the content is informative and entertaining. Based on his findings Mir (2011) constructed the model shown in figure 5. In his model, Mir (2011) shows that a consumer’s attitude toward mobile advertising is influenced by consumer permission, personalization of the message, and the message content.

![Figure 5. Proposed Model of Mobile Advertising. (Mir, 2011)](image)

From his research, Mir (2011) found that if advertising messages are sent to the mobile phones of mobile phone users after getting their permission, their attitude would turn positive towards the mobile advertisement. In their model, Bauer et al. (2005) discuss the component Perceived Utility, which covers both the personalization and message content aspect of mobile advertising, but Bauer et al. (2005) do not discuss consumer permission. However, according to Tsang et al. (2004), unsolicited mobile messages evoke negative consumer attitudes toward mobile advertising as mobile phones are personal in nature.

### 2.5 Youth in Other Countries

No research has yet been conducted on the Dutch youth and their attitudes toward mobile advertising, however several studies have been conducted on the youth from other countries. In this subchapter the main findings of several of these studies are provided, based on the country the study was performed in.

#### 2.5.1 U.S.A.

Wais & Clemons (2008) conducted research on how to apply mobile advertising, focusing on American students. From their research they found the American youth prefers to receive promotional messaging not from a company but instead from another person, like a friend or relative, this would make the advertisement be perceived more positively. The research showed the risk of brand damage due to mobile advertising is lessened when the advertisement is not send directly from the company. Further research on the American youth has been conducted by Hanley & Becker (2008). The results from this study showed incentives are a key motivating
factor for mobile advertising acceptance, the respondents have experienced an increase in advertisements on their mobile phones but annoyance has not increased. Furthermore, Hanley & Becker (2008) found the perceived risks of receiving mobile advertisements are not a barrier toward mobile advertisement acceptance.

Newell & Meier (2007) conducted a field test in order to study consumer attitudes toward mobile advertising focusing on American students. From their research they found the main reasons to adopt marketing services on mobile phones are the novelty of mobile advertising and the value the advertisements can offer the consumer. The main reasons for rejecting mobile advertising were found to be concerns about receiving too many advertisements, and technical and pricing limitations of the user’s mobile phone service.

Jun & Lee (2007) also conducted research on students’ attitudes toward mobile advertising in the U.S.A. The results from this study showed attitudes toward mobile advertising are mainly influenced by mobility, convenience and multimedia service and that a positive attitude toward mobile advertising led to favourable behavioural intentions.

Further research on the American youth’s attitude toward mobile advertising has been conducted by Hanley et al (2006). The main finding of this research was that students in the U.S.A. need to receive incentives in mobile advertisements in order for these students to accept the mobile advertisement.

2.5.2 Asia

Research on student attitudes toward mobile marketing in Bangladesh has been conducted by Chowdhury et al (2006), this research focused on mobile advertising via SMS. The findings of this research showed that when a mobile advertisement is pleasing and contains appropriate information consumers have a positive attitude toward the mobile advertisement. Furthermore, source credibility turned out to be an important factor for mobile advertising to be accepted by consumers in Bangladesh.

Peng (2006) conducted research on the factors that affect consumer purchase intention and behaviours in mobile marketing focusing on Chinese students. Peng (2006) showed content credibility, product profiles, personalization, consumer pattern, previous experience, privacy and permission affect a consumer’s purchase intention, responses and behaviours. The most important factor when looking at Chinese attitudes toward mobile advertising was found to be content credibility.

Rohm & Sultan (2006) conducted research on the factors influencing a consumer’s intention to engage in mobile marketing focusing on the difference between Pakistan and the U.S.A. In their research they identified several factors, including usage characteristics, privacy vulnerability, privacy concern, personal attachment, social influence, attitudes toward mobile, consumer innovativeness, and permission to interact in mobile space, that affect the consumer attitude. The main difference that was found between the two countries is that consumers from emerging markets like Pakistan are more likely to accept mobile marketing.
2.5.3 Africa

Radder et al (2010) conducted research on the attitude of the South African youth toward mobile advertising while focusing on SMS advertising. According to Radder et al (2010) social influence is a better predictor of the target market’s intentions to adopt SMS advertising than attitudes are. The results of this research showed behavioural intentions are affected by consumer attitudes, social influences, innovation levels, and perceived study utility. Furthermore, the research showed no relationship exists between perceived risk and advertising acceptance. Radder et al (2010) conclude SMS advertising can be used, but the advertiser must make sure the SMS content is based on the needs of their target market.

2.6 Model Used

For this thesis the researchers have chosen to work with the ‘model of consumer acceptance for mobile marketing’ of Bauer et al (2005). When comparing all models described above, the model of Bauer et al (2005) is the most extended model. Furthermore, it discusses all components necessary to answer the research questions of this thesis, such as the consumer-based acceptance drivers, the innovation-based acceptance drivers and the acceptance itself.
3 METHODOLOGY

In chapter three, thorough information will be provided about the methods and techniques applied while conducting this research. The methodology offers a clear overview of the stages that need to be covered, in order to gain valuable primary data, enabling the researchers to solve the research problem.

3.1 Research Design

A research design is a framework for conducting a marketing research project. This part will provide further details on the procedures necessary for obtaining the information needed to structure or solve the marketing problem under investigation (Malhotra & Birks, 2007).

3.1.1 Research method

In research, research methods are often referred to by two broad methods of reasoning: the inductive and deductive approach. The deductive approach means that researchers reach conclusions based upon agreed and measurable ‘facts’. The building and establishment of ‘facts’ forms the premises of deductive arguments. Deductive reasoning starts from general principles from which the deduction can be made, and proceeds to a conclusion by way of some statement linking the particular case in question. A deductive approach has a well-established role for existing theory; it informs the development of hypothesis, the choice of variables and the resultant measures. Whereas the deductive approach starts with theory expressed in the form of hypotheses, which are then tested, an inductive approach avoids this, arguing that it may prematurely close off possible areas of enquiry. Induction is used to establish the legitimacy of an interpretivist approach.

The deductive approach has been implemented during this research, as the researchers started with the collection of background data, existing theories and models. With the help of the model “Consumer Attitude Toward Mobile Marketing”, the researchers were able to create and formulate research questions. The answers to these research questions were retrieved with the help of the questionnaires and focus groups, which in the end leads to a conclusion and an answer to the research questions (Malhotra & Birks, 2007).

3.1.2 Qualitative and Quantitative Research

Qualitative research is an unstructured, primarily exploratory design based on small samples, intended to provide insight and understanding. Through qualitative research, researchers are continually looking to find better ways to understand consumers’ thought processes and motivations (Malhotra & Birks, 2007). The most important reasons for using qualitative research in this research, presented by Malhotra & Birks (2007), are (1) to discuss subconscious feelings of the consumers toward mobile advertising, (2) to gain a better understanding of this complex phenomenon under investigation, and (3) to better interpret and explain underlying reasons from the quantitative research findings. The qualitative data was collected through conducting focus groups.
Quantitative research consists of research techniques that seek to quantify data and, typically, apply some form of statistical analysis (Malhotra & Birks, 2007). In order to collect primary data a questionnaire was conducted. The data received through this questionnaire was analysed with SPSS and further explained by the findings of the qualitative data.

3.1.3 Research Format

In this research both exploratory and descriptive research has been conducted. Exploratory research is a research design characterised by a flexible and evolving approach to understand marketing phenomena that are inherently difficult to measure (Malhotra & Birks, 2007). Exploratory research can be used in cases where one must define the problem more precisely, identify relevant courses of action, or gain additional insights before going on to confirm findings using a conclusive design. The exploratory research consisted out of conducting a focus group.

Descriptive research is a type of conclusive research that has as its major objective to describe something, usually market characteristics or functions. Descriptive research is characterised by the prior formulation of specific research questions and hypotheses (Malhotra & Birks, 2007). Therefore a descriptive research is pre-planned and structured. Typically, a descriptive research is based on large representative samples. The descriptive research consisted out of conducting a questionnaire.

3.1.4 Data Collection Methods

Primary data are data originated by the researcher specifically to address the research problem. The primary data is collected both through quantitative and qualitative research. The quantitative data is collected through the conduction of a questionnaire. The questionnaire was internet based and spread by using social websites and e-mail. Internet questionnaires use hypertext mark-up language and are posted on a website (Malhotra & Birks, 2007). The questionnaire used in this research is built with the Qualtrics program and placed on the Qualtrics website (www.jibs.qualtrics.com). Within the questionnaire filter questions and skip patterns were used in order to collect valid data. The results of the questionnaire were analysed using SPSS. The qualitative data has been collected through the conduction of two focus groups. A focus group is a discussion conducted by a trained moderator in a non-structured and natural manner with a small group of participants (Malhotra & Birks, 2007). In order to run the focus groups, a topic guide was developed. A topic guide is a list of topics, questions and probes that are used by a moderator to help manage a focus group discussion (Malthora & Birks, 2007). The topic guide can be found in appendix 2.

Secondary data are data collected for some purpose other than the problem at hand (Malhotra & Birks, 2007). In this research secondary data is mainly used in the background research and to help answer the research questions. Secondary data are used as these are easily accessible, relatively inexpensive, and quickly obtained. The secondary data in this research is obtained from the internet, textbooks and research articles.

3.1.5 Population

The population within a research is the aggregate of all the elements, sharing some common set of characteristics, which comprise the universe for the purpose of the marketing research
problem (Malhotra & Birks, 2007). This research focusses on the attitude of the Dutch youth toward mobile advertising. In the Netherlands there are about 2.8 million people in the age of 15-29 (CBS, 2012). The population for this research consists of the entire youth in possession of a smartphone. Recent research found that 60% of the Dutch youth, in the age group of 15-29, uses a smartphone (Mediawijzer, 2011).

### 3.1.6 Sampling Methods

For this research non-probability sampling methods were applied. With non-probability, the selection process relies on the personal judgment of the researcher rather than on chance to select sample elements (Malhotra & Birks, 2007).

During the research, primary data has been collected with the use of a questionnaire and two focus groups. For the questionnaire, the sample was selected with the use of non-probability sampling, as the questionnaire was distributed through the internet targeting the entire youth between the ages of 15-29 throughout the Netherlands. The internet contains mediums as social websites, where the sample contains out of people in general; the researchers do not specifically know who they have send the questionnaires to. Therefore, with the use of filter questions, the general sample was filtered, resulting into the desired sample size.

Primary data collection, with the use of focus groups, was conducted with non-probability sampling. The respondents selected for this purpose, were carefully selected by the researchers in order to gain in-depth knowledge about the research phenomena. As the target group of this thesis consist of the Dutch youth, the focus lays on the Dutch students available in Jönköping. The students come from all different parts of the Netherlands, which is shown in figure 6.

![Figure 6. Distribution of Students Participating in the Focus Group.](image-url)
3.1.7 Sampling Techniques

The sampling techniques belonging to the non-probability sampling methods are the convenience sampling and the judgmental sampling technique.

The questionnaire, which used the non-probability sampling method, was conducted with the use of the convenience sampling technique. Convenience sampling attempts to obtain a sample of convenient elements. The selection of sampling units is left primarily to the interviewer. Often respondents are selected because they happen to be in the right place at the right time (Malhotra & Birks, 2007). For this thesis the researchers used contacts from previous universities and acquaintances in order to spread the questionnaire among respondents within the sampling frame. The questionnaire was spread by e-mail and through the social media websites of universities and other social organizations like sports clubs etc.

For the focus group, which used a form of non-probability method, the judgmental sampling technique was applied. With the use of judgmental sampling, respondents’ selection is based on the judgment of the researcher (Malhotra & Birks, 2007). The researcher believes that this group of respondents are representative of the population of interest. This is the case with this research. The sample size for this focus group was decided on by the researcher. As mentioned before the students currently available in the Jönköping, cover different parts of the Netherlands.

Currently the amount of the youth population in the Netherlands is 2.8 million (CBS, 2012). With the population size the researchers were able to calculate a representable sample size. A calculator on the internet has been used to create the sample size. The sample size with a reliability of 95% has been applied to find a representable sample size of 384 respondents. (Sample size calculator, 2012)

A. Fill the information needed to calculate the sample size:

1. What is the sample size margin you would like to apply? (%)
   - A sample size margin of 5% is usual while conducting research.
   - 5

2. What is the size of the population?
   - If the size is not available, use 20000.
   - 200000

3. What output do you expect in the research? (%)
   - If this is not possible to estimate, use 50.
   - 50

<table>
<thead>
<tr>
<th>Sample size with</th>
<th>A reliability level of 90%</th>
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<tbody>
<tr>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Sample size with</th>
<th>A reliability level of 95%</th>
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</table>

<table>
<thead>
<tr>
<th>Sample size with</th>
<th>A reliability level of 99%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B. Results:

- 271
- 384
- 663

Figure 7. Sample Size Calculator.

3.1.8 Data Collection Instruments, Sources and Procedures

For the quantitative research a questionnaire was conducted. The questionnaire has been designed with the program Qualtrics. The questionnaire was internet based and has been distributed by e-mail and through social networking sites. Filter questions have been used in the questionnaire in order to only have respondents from within the research population fill out the questionnaire. The questionnaire consisted out of structured questions, which are questions that specify the set of response alternatives and the response format (Malhotra & Birks, 2007). Dichotomous questions were used to find out whether respondents were familiar with the
subject under investigation, and to check whether the respondents belonged to the research population. In order to receive more detailed answers on consumers’ exact attitude toward certain attributes, scale questions were used. The scale questions were formulated in nominal scales, where the questions could be answered based on disagree-agree, disagree representing 1 and agree 6. The continuous rating scale has been selected for this purpose, as with this type of scale the answers are usually more accurate. The questionnaire was first designed in English, this questionnaire has been pilot tested by a marketing professor at Jönköping University. As the questionnaire would be send to Dutch respondents, it was then translated to Dutch. After having translated the questionnaire, it was tested by several marketing students, who considered the questionnaire to be perfect. However, before sending out the questionnaire the decision was made to have it tested by several non-marketers. After this test a couple of explanations on marketing terms were added before sending out the final questionnaire.

More primary data has been collected through the conduction of a focus group. The focus group has been run with Dutch students studying at Jönköping University. In order to run this focus group, a topic guide has been developed. This guide lists the issues to be discussed during the focus group (Appendix 2). The discussion was opened by using an introductory question in order to have the participants feel comfortable with the purpose of the research. In order to move the discussion toward the key questions to be answered, transition questions were used.

3.1.9 Data Analysis

The information collected through the previously mentioned methods and techniques were analysed either with the use of a statistical analysis programme (SPSS) or manually. First of all, the data was prepared before it was analysed. All the statements in the survey were formed positively, therefore no reversed scoring was needed. Inadequate data has been deleted, leaving only the useable, reliable and valid information to be processed and analysed.

Data retrieved via the questionnaires were implemented in the SPSS programme, and thereafter analysed with the use of statistical tests. The information left was applied to come up with a solution to the research problem.

Data collected with the use of the focus group, has been manually sorted in order to delete excess information, resulting in valuable data which is used in the discussion and conclusion part of the thesis.

3.1.10 Validity

Validity is mainly concerned with whether the results precisely perform what they are supposed to be about and what is in fact occurring in the situation and this is being dependent on the accurate measures (Saunders et al, 2009). Thus, the degree to which they accomplish the purpose for which they are being used (Worthen et al, 1993).

The established research questions ought to be answered with the use of the answers of the focus groups and questionnaires. In order to ratify the validity of this research, the answers need to provide a solution to the main and sub research questions.
3.1.11 Reliability

Reliability considers the extent to which a measurement reproduces consistent results if the process of measurement were to be repeated (Malhotra & Birks, 2007). A test is considered reliable if one gets the same result repeatedly. For example, if a test is designed to measure a trait, then each time the test is administered to a subject, the results should be approximately the same. It is impossible to calculate reliability exactly, but it can be estimated in a number of different ways.

With the application of multiple studies and models, it has been attempted to achieve reliable information to start with this research. The reliability of this research will be proven reliable, in case of a consistent result compared to the previous studies.

A summary of the methodology is given in table 2.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Qualitative Research</th>
<th>Quantitative Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Method</td>
<td>Focus Group</td>
<td>Questionnaire</td>
</tr>
<tr>
<td>Research Format</td>
<td>Exploratory Research</td>
<td>Descriptive Research</td>
</tr>
<tr>
<td>Data Collection Method</td>
<td>Primary Data</td>
<td>Primary Data</td>
</tr>
<tr>
<td>Population</td>
<td>Dutch Students in Jönköping</td>
<td>Dutch Youth</td>
</tr>
<tr>
<td>Sampling Method</td>
<td>Non-Probability Sampling</td>
<td>Non-Probability Sampling</td>
</tr>
<tr>
<td>Sampling Techniques</td>
<td>Judgmental Sampling</td>
<td>Convenience Sampling</td>
</tr>
<tr>
<td>Sample Size</td>
<td>6-10 Participants</td>
<td>384 Respondents</td>
</tr>
<tr>
<td>Data Collection Instruments</td>
<td>Topic Guide</td>
<td>Qualtrics</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>Manually</td>
<td>SPSS</td>
</tr>
</tbody>
</table>

Table 2. Summary Methodology
4 DATA ANALYSIS

In chapter four the data collected will be analysed. First the analysis of the data collected through the questionnaire is given. The information collected through the questionnaire is analysed with SPSS with the help of several tests. Second the data collected through the focus groups is analysed. The information collected through the focus groups is analysed manually.

4.1 Quantitative Data

4.1.1 Descriptive Statistics

The questionnaire had a total of 202 respondents of which, after analysing, 139 were suitable to use for the data analysis of this research. The respondents were filtered on age and ownership of smart phones. Furthermore, only respondents who filled out the entire questionnaire were used for the data analysis. The respondents were grouped on age and gender. The variable age was divided into two groups; Group 1: 15-21 years and group 2: 22-29 years. The distributions of these variables can be found in table 3.

<table>
<thead>
<tr>
<th>Age</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-21</td>
<td>29</td>
<td>20.9%</td>
</tr>
<tr>
<td>22-29</td>
<td>110</td>
<td>79.1%</td>
</tr>
<tr>
<td>Total</td>
<td>139</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>67</td>
<td>48.2%</td>
</tr>
<tr>
<td>Female</td>
<td>72</td>
<td>51.8%</td>
</tr>
<tr>
<td>Total</td>
<td>139</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 3. Age and Gender Distribution

In table 4, shown below, the means and standard deviations of all statements in the questionnaire can be found, giving a good overview of all the data received. All the statements were put in a scale form, consisting out of a scale from 1 to 6. In this scale 1 means totally disagree and 6 means totally agree.

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>Factor</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>S. D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usually I am among the first to try out a new product</td>
<td>IN1</td>
<td>139</td>
<td>1</td>
<td>6</td>
<td>3.50</td>
<td>1.515</td>
</tr>
<tr>
<td>Often I try new products before my friends do</td>
<td>IN2</td>
<td>139</td>
<td>1</td>
<td>6</td>
<td>3.24</td>
<td>1.596</td>
</tr>
<tr>
<td>Generally, I enjoy buying new products</td>
<td>IN3</td>
<td>139</td>
<td>1</td>
<td>6</td>
<td>4.39</td>
<td>1.375</td>
</tr>
<tr>
<td>I have a profound knowledge about mobile communications</td>
<td>EK1</td>
<td>139</td>
<td>1</td>
<td>6</td>
<td>4.33</td>
<td>1.259</td>
</tr>
<tr>
<td>In comparison to my friends I am an expert in mobile communications</td>
<td>EK2</td>
<td>139</td>
<td>1</td>
<td>6</td>
<td>3.72</td>
<td>1.404</td>
</tr>
<tr>
<td>In my circle of friends I am usually the first who knows about the latest mobile phones</td>
<td>EK3</td>
<td>139</td>
<td>1</td>
<td>6</td>
<td>3.37</td>
<td>1.598</td>
</tr>
<tr>
<td>I enjoy reading different advertising for the sake of comparison</td>
<td>IS1</td>
<td>139</td>
<td>1</td>
<td>6</td>
<td>3.39</td>
<td>1.604</td>
</tr>
<tr>
<td>I tend to read a lot of different advertising just for</td>
<td>IS2</td>
<td>139</td>
<td>1</td>
<td>6</td>
<td>2.43</td>
<td>1.504</td>
</tr>
<tr>
<td>S. No.</td>
<td>Description</td>
<td>Scale</td>
<td>n</td>
<td>Mean</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------</td>
<td>---</td>
<td>------</td>
<td>----</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>In the sake of a change of pace I tend to read advertising in my spare time</td>
<td></td>
<td>139</td>
<td>2.50</td>
<td>1.543</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Generally I find advertising a good thing</td>
<td></td>
<td>139</td>
<td>4.00</td>
<td>1.404</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I like advertising</td>
<td></td>
<td>139</td>
<td>3.01</td>
<td>1.552</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Through advertising messages via the mobile phone I receive timely information</td>
<td></td>
<td>139</td>
<td>2.31</td>
<td>1.454</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Through advertising messages via the mobile phone I receive exclusive information</td>
<td></td>
<td>139</td>
<td>2.25</td>
<td>1.410</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>The advertising messages customized to my profile are useful</td>
<td></td>
<td>139</td>
<td>2.83</td>
<td>1.511</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>I can benefit from advertising messages via mobile phone</td>
<td></td>
<td>139</td>
<td>2.75</td>
<td>1.552</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>I find advertising messages via the mobile phone exciting</td>
<td></td>
<td>139</td>
<td>2.14</td>
<td>1.272</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>The advertising messages customized to my profile are fun</td>
<td></td>
<td>139</td>
<td>2.65</td>
<td>1.443</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>The interactiveness makes mobile advertising fun</td>
<td></td>
<td>139</td>
<td>2.94</td>
<td>1.582</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>I forward SMS messages I like to my friends</td>
<td></td>
<td>139</td>
<td>2.53</td>
<td>1.661</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>By using advertising messages via the mobile phone I can demonstrate my innovativeness to my friends</td>
<td></td>
<td>139</td>
<td>1.88</td>
<td>1.186</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>There is a risk of personal data being misused when using mobile marketing services</td>
<td></td>
<td>139</td>
<td>4.73</td>
<td>1.296</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>There is a risk of receiving unwanted messages when using mobile marketing services</td>
<td></td>
<td>139</td>
<td>5.19</td>
<td>1.074</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>There is a risk of losing privacy on my mobile phone when using mobile marketing services</td>
<td></td>
<td>139</td>
<td>4.73</td>
<td>1.213</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>If I use mobile marketing services most of the people who are important to me will regard me as clever</td>
<td></td>
<td>139</td>
<td>2.13</td>
<td>1.256</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>If I use mobile marketing services most of the people who are important to me will regard it as useful</td>
<td></td>
<td>139</td>
<td>2.36</td>
<td>1.263</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>If I use mobile marketing services most of the people who are important to me will regard it as valuable</td>
<td></td>
<td>139</td>
<td>2.32</td>
<td>1.286</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>I find receiving advertising messages via the mobile phone positive</td>
<td></td>
<td>139</td>
<td>2.24</td>
<td>1.361</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>I appreciate receiving advertising messages via the mobile phone</td>
<td></td>
<td>139</td>
<td>2.07</td>
<td>1.261</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>I would read all the mobile advertising messages I receive in the future</td>
<td></td>
<td>139</td>
<td>1.94</td>
<td>1.290</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>My general intention to use mobile marketing services is very high</td>
<td></td>
<td>139</td>
<td>2.12</td>
<td>1.246</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>I will think about using mobile marketing services</td>
<td></td>
<td>139</td>
<td>2.11</td>
<td>1.238</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>I will use mobile marketing services in the future</td>
<td></td>
<td>139</td>
<td>2.30</td>
<td>1.289</td>
<td></td>
</tr>
</tbody>
</table>

Table 4. Descriptive Statistics.
In table 4, some interesting facts are shown. When looking at the mean, the following statements have a considerably high mean:

- “Generally, I enjoy buying new products” (4.39) $\rightarrow$ Innovativeness.
- “I have a profound knowledge about mobile communications” (4.33) $\rightarrow$ Existing Knowledge
- “Generally I find advertising a good thing” (4.00) $\rightarrow$ Attitude toward Advertising.
- “There is risk of personal data being misused when using mobile marketing services” (4.73) $\rightarrow$ Perceived Risk.
- “There is a risk of receiving unwanted messages when using mobile marketing services” (5.19) $\rightarrow$ Perceived Risk.
- There is a risk of losing privacy on my mobile phone when using mobile marketing services” (4.73) $\rightarrow$ Perceived Risk.

The table shows that people are very aware of the risk included in mobile advertising as the statements regarding risk have the highest means, even though they like advertisements and are innovative and they are knowledgeable on mobile communications.

The following statements have a considerable low mean:

- “By using advertising messages via the mobile phone I can demonstrate my innovativeness to my friends” (1.88) $\rightarrow$ Perceived Utility Social.
- “I would read all the mobile advertising messages I receive in the future” (1.94) $\rightarrow$ Attitude Toward Mobile Advertising.

According to the finding of these statements it can be seen that the perceived utility social is irrelevant. The attitude toward mobile advertising concerning future behaviour is also low.

In table 5 the descriptive statistics of consumer attitudes toward mobile advertising and the dimension this attitude is influenced by are illustrated. In this table the scale value 1 stands for a very negative attitude whereas 6 stands for a very positive attitude toward mobile advertising. These descriptive statistics will be used in answering the main question of this thesis, ‘What is the Dutch youth’s attitude toward mobile advertising?’. With the mean being 2.0863, the attitude toward mobile advertising is quite negative.

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>S. D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovativeness</td>
<td>139</td>
<td>1</td>
<td>6</td>
<td>3.7122</td>
<td>1.29548</td>
</tr>
<tr>
<td>Existing Knowledge</td>
<td>139</td>
<td>1</td>
<td>6</td>
<td>3.8082</td>
<td>1.28222</td>
</tr>
<tr>
<td>Information Seeker</td>
<td>139</td>
<td>1</td>
<td>6</td>
<td>2.7722</td>
<td>1.32852</td>
</tr>
<tr>
<td>Attitude Toward Advertising</td>
<td>139</td>
<td>1</td>
<td>6</td>
<td>3.5036</td>
<td>1.31118</td>
</tr>
<tr>
<td>Perceived Utility - Information</td>
<td>139</td>
<td>1</td>
<td>6</td>
<td>2.5360</td>
<td>1.32101</td>
</tr>
<tr>
<td>Perceived Utility - Entertainment</td>
<td>139</td>
<td>1</td>
<td>6</td>
<td>2.5803</td>
<td>1.29494</td>
</tr>
<tr>
<td>Perceived Utility - Social</td>
<td>139</td>
<td>1</td>
<td>6</td>
<td>2.2050</td>
<td>1.29213</td>
</tr>
</tbody>
</table>
4.1.2 Factor Analysis

To check whether the factors in this study resemble and load the same way as suggested in the Bauer et al model, factor analyses have been applied to check whether it was possible to group the different statements into smaller groups. First the model used during this research, consumer attitude toward mobile marketing, has been divided into 3 main parts. The division has been made to increase the convenience of conducting tests within the SPSS program. The division is shown in Figure 8.

![Figure 8. Consumer Attitude Towards Mobile Advertising.](image)

In order to check the factorability the data, both the Bartlett’s test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy were run. According to Pallant (2005) the Bartlett’s test of sphericity should be significant (p<.05) for the factor analysis to be considered appropriate. The KMO index ranges from 0 to 1 where, according to Pallant (2005), .6 is suggested as the minimum value for a good factor analysis. In table 6 the scores for both the Bartlett’s test of sphericity and the KMO measure of adequacy are shown. With the KMO values all being above .6 and all Bartlett’s significance levels being .000, this analysis is an appropriate factor analysis.

<table>
<thead>
<tr>
<th>Risk</th>
<th>139</th>
<th>1</th>
<th>6</th>
<th>4,8825</th>
<th>1,07741</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Norms</td>
<td>139</td>
<td>1</td>
<td>6</td>
<td>2,2686</td>
<td>1,14902</td>
</tr>
<tr>
<td>Attitude Toward Mobile Advertising</td>
<td>139</td>
<td>1</td>
<td>6</td>
<td>2.0863</td>
<td>1.18861</td>
</tr>
<tr>
<td>Behavioural Intention</td>
<td>139</td>
<td>1</td>
<td>6</td>
<td>2.1751</td>
<td>1.18181</td>
</tr>
</tbody>
</table>

Table 5. Descriptive Statistics Attitude Toward Mobile Advertising
Within the factor analysis the scree plot and rotated component matrix were used to check what variables should be in the different factors. When producing a scree plot, one has to make sure that only factors with an eigenvalue of above 1 are selected, furthermore Catell (1966) recommends to retain all factors above the elbow as these factors contribute the most to the explanation of the variance in the data set. For the rotated component matrix Varimax rotation was used, this method attempts to minimize the number of variables that have high loadings on each factor (Pallant, 2005). After the factors were constructed the Cronbach Alpha was calculated for each individual factor in order to check the internal consistency of each factor, which shows the reliability of the factors. According to Pallant (2005), the Cronbach Alpha values should be above .7 in order to be considered reliable.

Part 1 Consumer-based acceptance drivers:

- Innovativeness (IN)
- Existing Knowledge (EK)
- Information Seeker (IS)
- Attitude toward Advertising (ATA)

The first step is the scree plot, revealing the amount of useful components there are found. The scree plot in figure 9 shows that, from Eigenvalues of 1 and higher, there are 3 useful components available for part 1. However, based on the fact that the Bauer et al (2005) model has been used as a guideline for this research, the amount of components formed is 4. As the 4

<table>
<thead>
<tr>
<th>KMO and Bartlett’s Test</th>
<th>Consumer-Based Acceptance Drivers</th>
<th>Innovation-Based Acceptance Drivers</th>
<th>Acceptance</th>
</tr>
</thead>
<tbody>
<tr>
<td>KMO Measure of Sampling Adequacy</td>
<td>0.786</td>
<td>0.847</td>
<td>0.897</td>
</tr>
<tr>
<td>Bartlett’s Test of Sphericity Significance</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Table 6. KMO and Bartlett’s Test.
components and its reliability have already been tested by Bauer et al (2005), with the use of the Cronbach’s Alpha, it can be assumed that the amount of components can be applied.

<table>
<thead>
<tr>
<th>Rotated Component Matrix</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>In comparison to my friends I am an expert in mobile communications.</td>
<td>.924</td>
</tr>
<tr>
<td>I have a profound knowledge about mobile communications.</td>
<td>.836</td>
</tr>
<tr>
<td>In my circle of friends I am usually the first who knows about the latest mobile phones.</td>
<td>.824</td>
</tr>
<tr>
<td>Often I try new products before my friends do.</td>
<td>.650</td>
</tr>
<tr>
<td>Usually I am among the first to try out a new product.</td>
<td>.636</td>
</tr>
<tr>
<td>I tend to read a lot of different advertising just for the sake of a change of pace.</td>
<td></td>
</tr>
<tr>
<td>I tend to read advertising in my spare time.</td>
<td></td>
</tr>
<tr>
<td>I enjoy reading different advertising for the sake of comparison.</td>
<td>.321</td>
</tr>
<tr>
<td>Generally I find advertising a good thing.</td>
<td></td>
</tr>
<tr>
<td>I like advertising.</td>
<td>.334</td>
</tr>
<tr>
<td>Generally, I enjoy buying new products.</td>
<td></td>
</tr>
</tbody>
</table>

Table 7. Rotated Component Matrix Consumer-Based Acceptance Drivers.

According to table 7 there are 4 components to be made within the consumer-based acceptance drivers: Innovativeness, Existing Knowledge, Information Seeker, and Attitude toward Advertising components. Looking at the values of the different statements, groups can be formed. When statements have more values in different components boxes, the one with the highest amount will be perceived as the counting value. However, when the values only have the slightest amount of difference, it needs to be checked in what component the value fits best.

Component 1 comprises the following statements:

- In comparison to my friends I am an expert of mobile communications. (0.924)
- I have profound knowledge about mobile communications. (0.836)
- In my circle of friends I am usually the first who knows about the latest mobile phones. (0.824)

Whether component 1 is reliable enough to be formed will be tested with the use of the Cronbach’s Alpha.
Component 2 comprises the following statements:

- I tend to read a lot of different advertising just for the sake of a change of pace. (0.920)
- I tend to read advertising in my spare time. (0.893)
- I enjoy reading different advertising for the sake of comparison. (0.533)

The statement: “I enjoy reading different advertising for the sake of comparison” has values in three different components, however the value in component 2 has the highest score, therefore the decision has been made to select this statement for component 2.

Whether this component is actually reliable enough to be formed into the new “information Seeker” component will be tested with the Cronbach’s Alpha test.

Component 3 comprises the following statements:

- Generally I find advertising a good thing. (0.917)
- I like advertising. (0.814)

The reliability of this component will be tested with the help of the Cronbach’s Alpha test.

Component 4 comprises the following statements:

- Often I try new product before my friends do. (0.590)
- Usually I am among the first to try out a new product. (0.597)
- Generally, I enjoy buying new products. (0.859)

Even though the statements “Often I try new product before my friends do” and “Usually I am among the first to try out a new product” have a slightly higher value in different boxes, the decision has been made to include them in component 4 as the statements have a higher similarity with these statements compared to other statements. To test the reliability of this new formed component, a Cronbach’s Alpha test will be conducted.

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
</tr>
<tr>
<td>Existing Knowledge</td>
</tr>
<tr>
<td>Innovativeness</td>
</tr>
<tr>
<td>Information Seeking</td>
</tr>
<tr>
<td>Attitude Toward Advertising</td>
</tr>
</tbody>
</table>

Table 8. Cronbach's Alpha Consumer-Based Acceptance Drivers.

According to table 8, the Cronbach’s Alpha for component 1 is 0.880, meaning that the internal consistency reliability for this component is strong. Therefore the component can be grouped, and renamed into: Existing Knowledge. For component 2, the Cronbach’s Alpha is 0.831, which means that the component can be transformed into a group named: Innovativeness. The internal consistency reliability of component 3 is also above the given amount of 0.7, namely: 0.819. With
the high value, component 3 can be regrouped into: Information Seeking. Component 4 has a Cronbach’s Alpha score of 0.805, which is high above the determinant of 0.7. It can be concluded that component 4 can also be formed into a new group: Attitude toward Advertising.

Part 2 Innovation-based acceptance drivers:

- Perceived Utility (PU)
- PU Information (PUinf)
- PU Entertainment (PUent)
- PU Social (PUsoc)
- Perceived Risk (RP)

The scree plot in Figure 10 shows that for part 2 there are 2 useful components revealed considering the Eigenvalue from 1 on and higher. Nevertheless, considering the research of Bauer et al (2005), where the amount of components is 4, the amount of 4 components has also been applied for this study.

### Rotated Component Matrix

<table>
<thead>
<tr>
<th>The advertising messages customized to my profile are fun.</th>
<th>Component 1</th>
<th>Component 2</th>
<th>Component 3</th>
<th>Component 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>The interactiveness makes mobile advertising fun.</td>
<td>.884</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I find advertising messages via the mobile phone exciting.</td>
<td>.710</td>
<td>.409</td>
<td>.310</td>
<td></td>
</tr>
<tr>
<td>Through advertising messages via the mobile phone I receive exclusive information.</td>
<td></td>
<td></td>
<td></td>
<td>.861</td>
</tr>
</tbody>
</table>

### Total Variance Explained

<table>
<thead>
<tr>
<th>Component</th>
<th>Eigenvalue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5.715</td>
</tr>
<tr>
<td>2</td>
<td>2.442</td>
</tr>
<tr>
<td>3</td>
<td>.941</td>
</tr>
<tr>
<td>4</td>
<td>.746</td>
</tr>
<tr>
<td>5</td>
<td>.503</td>
</tr>
<tr>
<td>6</td>
<td>.364</td>
</tr>
<tr>
<td>7</td>
<td>.312</td>
</tr>
<tr>
<td>8</td>
<td>.268</td>
</tr>
<tr>
<td>9</td>
<td>.229</td>
</tr>
<tr>
<td>10</td>
<td>.206</td>
</tr>
<tr>
<td>11</td>
<td>.154</td>
</tr>
<tr>
<td>12</td>
<td>.119</td>
</tr>
</tbody>
</table>

Figure 10. Scree Plot Innovation-Based Acceptance Drivers with accompany table.
Through advertising messages via the mobile phone I receive timely information. 839
I can benefit from advertising messages via the mobile phone. 715
The advertising messages customized to my profile are useful. 620
There is a risk of losing privacy on my mobile phone when using mobile marketing services. 916
There is a risk of personal data being misused when using mobile marketing services. 900
There is a risk of receiving unwanted messages when using mobile marketing services. 884
I forward SMS messages I like to my friends. 902
By using advertising messages via the mobile phone I can demonstrate my innovativeness to my friends. 741

Table 9. Rotated Components Matrix Innovations-Based Acceptance Drivers.

According to table 9 there are components to be made within the innovation-based acceptance drivers: Perceived Utility social, Perceived Utility entertainment, Perceived Utility information, and Perceived Risk. Looking at the values of the different statements, groups can be formed. When statements have more values in different components boxes, the one with the highest amount will be perceived as the counting value. However, when the values only have the slightest amount of difference, it needs to be checked in what component the value fits best.

Component 1 comprises the following statements:

- The advertising messages customized to my profile are fun. (0.884)
- The instructiveness makes mobile advertising fun. (0.836)
- I find advertising messages via the mobile phone exciting. (0.710)

The statement: “I find advertising messages via the mobile phone exciting” has more values in other components, however it has been decided on to choose for this component as the value was higher. A Cronbach’s Alpha test will be applied to test the components reliability.

Component 2 comprises the following statements:

- Through advertising messages via the mobile phone I receive exclusive information. (0.861)
- Through advertising messages via the mobile phone I receive timely information. (0.839)
- I can benefit from advertising messages via the mobile phone. (0.715)
- The advertising messages customized to my profile are useful. (0.620)
The statement: “I can benefit from advertising messages via the mobile phone” and “The advertising messages customized to my profile are useful” have values in other components, however the value in component 2 has the highest score, that is why the decision has been made to select these statements for component 2. Whether this component is actually reliable, will be tested with the Cronbach’s Alpha test.

Component 3 comprises the following statements:
- There is a risk of losing privacy on my mobile phone when using mobile marketing services. (0.916)  
- There is a risk of personal data being misused when using mobile marketing services. (0.814)  
- There is a risk of receiving unwanted messages when using mobile marketing services. (0.884)  

All the statements within component 3 focus on the factor Perceived Risk. The reliability of this component will be tested with the help of the Cronbach’s Alpha test.

Component 4 comprises the following statements:
- I forward SMS messages I like to my friends. (0.902)  
- By using advertising messages via the mobile phone I can demonstrate my innovativeness to my friends. (0.741)  

Even though the statements “By using advertising messages via the mobile phone I can demonstrate my innovativeness to my friends” has more values in other boxes, the decision has been made to include them in component 4 as the statement has a higher value within this component.

The actual Cronbach’s Alpha of the ‘new formed’ groups will be tested, in order to find whether the internal consistency of a component was reliable.

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor</td>
</tr>
<tr>
<td>Perceived Utility Information</td>
</tr>
<tr>
<td>Perceived Utility Entertainment</td>
</tr>
<tr>
<td>Perceived Utility Social</td>
</tr>
<tr>
<td>Perceived Risk</td>
</tr>
</tbody>
</table>

Table 10. Cronbach’s Alpha Innovation-Based Acceptance Drivers.

According to table 10 the Cronbach’s Alpha for component 1 is 0.913, which is above the 0.7 determinant and therefore means that the internal consistency reliability for this component is strong. The component can be grouped, and renamed into: Perceived Utility Information. Component 2 has a Cronbach’s Alpha is 0.883, which also lies above the 0.7, making it possible to transform the component in the group: Perceived Utility Entertainment. The internal consistency reliability of component 3 is also above the given amount of 0.7, namely: 0.753.
Concluding that component 3 can also be formed into the new group: Perceived Utility Social. The same rule can be applied to component 4, since the Cronbach’s Alpha value is higher than the 0.7. With a value of 0.882 the component can be named: Perceived Risk.

**Part 3 Acceptance:**

- Attitude toward Mobile Marketing (Aact)
- Social Norms (SN)
- Behavioural Intentions (BI)

![Scree Plot](image)

**Total Variance Explained**

<table>
<thead>
<tr>
<th>Component</th>
<th>Eigenvalue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6.076</td>
</tr>
<tr>
<td>2</td>
<td>1.117</td>
</tr>
<tr>
<td>3</td>
<td>0.489</td>
</tr>
<tr>
<td>4</td>
<td>0.368</td>
</tr>
<tr>
<td>5</td>
<td>0.321</td>
</tr>
<tr>
<td>6</td>
<td>0.215</td>
</tr>
<tr>
<td>7</td>
<td>0.182</td>
</tr>
<tr>
<td>8</td>
<td>0.136</td>
</tr>
<tr>
<td>9</td>
<td>0.096</td>
</tr>
</tbody>
</table>

*Figure 11. Scree Plot Acceptance with accompany table.*

The scree plot in figure 11 displays the useful amounts of components considering part 3. Regarding the Eigenvalue shown in the table, there are 2 useful components available. As mentioned earlier, the researchers have decided to continue with the research of Bauer et al (2005), who claim that there are 3 components. Therefore, the decision was made to continue with 3 components of which the internal reliability is proven with the help of the Cronbach’s Alpha test.

**Rotated Component Matrix**

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>I will use mobile marketing services in the future.</td>
<td></td>
<td></td>
<td>.874</td>
</tr>
<tr>
<td>I will think about using mobile marketing services.</td>
<td></td>
<td>.792</td>
<td></td>
</tr>
<tr>
<td>My general intention to use mobile marketing services is very high.</td>
<td></td>
<td></td>
<td>.432</td>
</tr>
<tr>
<td>If I use mobile marketing services most of the people who are important to me will regard it as valuable.</td>
<td></td>
<td>.742</td>
<td>.342</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.453</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.855</td>
</tr>
</tbody>
</table>
If I use mobile marketing services most of the people who are important to me will regard me as clever. (0.849)

If I use mobile marketing services most of the people who are important to me will regard it as useful. (0.810)

I would read all the mobile advertising messages I receive in the future. (0.799)

I appreciate receiving advertising messages via the mobile phone. (0.776)

I find receiving advertising messages via the mobile phone positive. (0.679)

Table 11. Rotated Component Matrix Acceptance.

According to table 11 there are 3 different components to be formed within the Acceptance part.

Component 1 comprises the following statements:
- I will use mobile marketing services in the future. (0.874)
- I will think about using mobile marketing services. (0.792)
- My general intention to use mobile marketing services is very high. (0.742)

The statements: “I will think about using mobile marketing services” and “My general intention to use mobile marketing services is very high” have more values in other different components, however the value within component 1 are the highest therefore they are included in component 1. The following step is to explore the reliability of this component with the use of Cronbach’s Alpha test.

Component 2 comprises the following statements:
- If I use mobile marketing services most of the people who are important to me will regard it as valuable. (0.855)
- If I use mobile marketing services most of the people who are important to me will regard me as clever. (0.849)
- If I use mobile marketing services most of the people who are important to me will regard it as useful. (0.810)

The statement: “If I use mobile marketing services most of the people who are important to me will regard it as useful” has another value in component 1, however the value within component 2 is much higher, therefore it has been selected for component 2. Whether this component is actually reliable in order to be formed into a new group will be tested with the Cronbach’s Alpha test.

Component 3 comprise the following factors:
- I would read all the mobile advertising messages I receive in the future. (0.799)
- I appreciate receiving advertising messages via the mobile phone. (0.776)
- I find receiving advertising messages via the mobile phone positive. (0.679)
All three statements mentioned above in the component 3 row have more values in other component boxes, however these values are lower compared to the values within component 3. Since the highest values can be found in component 3, it has been decided to include these in component 3.

The following step is the Cronbach’s Alpha, which helps to test whether the new components have an internal consistency concerning the reliability.

<table>
<thead>
<tr>
<th>Reliability Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor</strong></td>
</tr>
<tr>
<td>Social Norms</td>
</tr>
<tr>
<td>Attitude Toward Mobile Advertising</td>
</tr>
<tr>
<td>Behavioural Intentions</td>
</tr>
</tbody>
</table>

Table 12. Cronbach’s Alpha Acceptance.

Considering table 12 the value of the Cronbach’s Alpha for component 1 is 0.891. This value is above the given determinant of 0.7, which gives the opportunity to create a strongly reliable new group: Social Norms. Component 2 shows a Cronbach’s Alpha of 0.898, again higher than the 0.7, therefore the group can be renamed into: Attitude Toward Mobile Advertising. Regarding the Cronbach’s Alpha of component 3, which is highly above the given 0.7, the component can transformed in a strong new group: Behavioural Intentions.

4.1.3 Multiple Regression Analysis

Checking the assumptions

A multiple regression analysis was run in order to prove the relationships between the independent variables innovativeness, existing knowledge, information seeker, attitude toward advertising, perceived utility information, perceived utility entertainment, perceived utility social, risk, social norms, and behavioural intention and the dependent variable attitude toward mobile advertising. This regression analysis is shown in appendix 5. According to Pallant (2005), each independent variable should show a correlation with the dependent variable of preferably above 0.3. From the correlations table in table 13 can be concluded that all independent variables have a relationship with the dependent variable, however both innovativeness and existing knowledge show a relationship below 0.3, of 0.075 and 0.027 respectively. Risk is the only variable that shows a negative relationship of -0.045. Furthermore, Tabachnick & Fidell (2001) say that one should think carefully before including two variables with a bivariate correlation of above 0.7 or more in the same analysis. In this regression analysis all variables meet this expectation except for innovativeness and existing knowledge which show a bivariate correlation of 0.716.
Correlations

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovativeness</td>
<td>1.00</td>
<td>0.75</td>
<td>0.57</td>
<td>0.43</td>
<td>0.45</td>
<td>0.41</td>
<td>0.40</td>
<td>0.646</td>
<td>0.78</td>
<td>0.227</td>
<td>0.223</td>
</tr>
<tr>
<td>Existing Knowledge</td>
<td>0.75</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Seeker</td>
<td>0.57</td>
<td>0.76</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attitude Toward Advertising</td>
<td>0.43</td>
<td>0.45</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Utility - Information</td>
<td>0.41</td>
<td>0.41</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Utility - Entertainment</td>
<td>0.40</td>
<td>0.40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived Utility - Social</td>
<td>0.646</td>
<td>0.646</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk</td>
<td>0.78</td>
<td>0.227</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Norms</td>
<td>0.227</td>
<td>0.227</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioural Intention</td>
<td>0.223</td>
<td>0.223</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 13. Correlations of Regression Analysis.

Within the regression analysis also a collinearity diagnostics was performed. These diagnostics provided two important values; tolerance and the variance inflation factor (VIF). According to Pallant (2005), tolerance is an indicator of how much of the variability of the specified independent is not explained by other independent variables in the model. When tolerance shows a value lower than 0.10 the multiple correlations with other variables is high, suggesting the possibility of multicollinearity. According to Pallant (2005), VIF is the inverse of the tolerance value, so values above 10 indicate multicollinearity. From the coefficients table, shown in Table 14, can be seen that all tolerance values are above 0.10 and therefore the multicollinearity assumption has not been violated. This is also supported by the VIF values, which are all well below 10.

Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Constant)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovativeness</td>
<td></td>
<td>.475</td>
<td>2.165</td>
</tr>
<tr>
<td>Existing Knowledge</td>
<td></td>
<td>.448</td>
<td>2.230</td>
</tr>
<tr>
<td>Information Seeker</td>
<td></td>
<td>.571</td>
<td>1.711</td>
</tr>
<tr>
<td>Attitude Toward Advertising</td>
<td></td>
<td>.506</td>
<td>1.649</td>
</tr>
<tr>
<td>Perceived Utility - Information</td>
<td></td>
<td>.362</td>
<td>2.763</td>
</tr>
<tr>
<td>Perceived Utility - Entertainment</td>
<td></td>
<td>.353</td>
<td>2.831</td>
</tr>
<tr>
<td>Perceived Utility - Social</td>
<td></td>
<td>.497</td>
<td>2.013</td>
</tr>
<tr>
<td>Risk</td>
<td></td>
<td>.804</td>
<td>1.131</td>
</tr>
<tr>
<td>Social Norms</td>
<td></td>
<td>.505</td>
<td>1.982</td>
</tr>
<tr>
<td>Behavioural Intention</td>
<td></td>
<td>.401</td>
<td>2.402</td>
</tr>
</tbody>
</table>

Table 14. Coefficients of Regression Analysis.

In the regression analysis a normal probability plot was constructed. According to Pallant (2005) in a normal probability plot you want your points to lie in a reasonably straight diagonal line from bottom left to top right. From appendix 5 can be concluded that this is the case in this regression
analysis, meaning there are no major deviations from normality. In order to double check the deviation from normality, also a scatterplot was made. According to Pallant (2005), in a scatterplot you hope for the residuals to be roughly rectangularly distributed. From the scatterplot in appendix 5 can be concluded that this is the case in this regression analysis, proving there are no major deviations for normality.

Evaluating the model

In order to evaluate the model, it is important to look at the model summary. The model summary shows an R square of 0.866. According to Pallant (2005) this value tells how much of the variance in the dependent variable, in this case consumer attitudes toward mobile advertising, is explained by the model, consisting out of the independent variables. In this case the value is 0.866, meaning that the independent variables explain 86.6% per cent of the variance in attitude toward mobile advertising. However, also an adjusted R square is provided. When a small sample is involved, as is the case in this research with 139 respondents, the R square tends to be a rather optimistic overestimation of the true value in the population (Tabachnick & Fidell, 2001). The adjusted R square corrects this value to provide a better estimate of the true population value. The adjusted R square in this regression analysis is 0.730, meaning that the independent variables explain 73.0% of the variance in attitude toward mobile advertising. As shown by the Anova table in appendix 5 the model reaches statistical significance with Sig =.000, meaning p<.0005.

Evaluating each of the independent variables

It is important to know which of the variables included in the model contributed to the prediction of the dependent variable, which can be found in the coefficients table, shown in table 14. In order to compare the different variables, one looks at the standardized coefficients in the Beta column (Pallant, 2005). The variables scoring highest on the beta values make the strongest unique contribution explaining the dependent variable. In this research the variables ‘behavioural intention’, ‘perceived utility entertainment’, and ‘social norms’ score highest on the beta value, with respective scores of .537, .225 and .130, which is shown in table 15. In order for a variable to make a statistically significant unique contribution to the equation, the variable has to have a significance value below .05. As can be seen in table 15, only the variables ‘behavioural intention’, ‘perceived utility entertainment’, and ‘social norms’ have significant values below .05, making these the only values making a significant unique contribution to the equation.
Table 15. Coefficients of Regressions Analysis.

Through the part correlations stated within the coefficients table in appendix 5 can be calculated how much the total variance in the dependent variance is uniquely and how much R square would drop if it would not be included in the model (Pallant, 2005). In this research behavioural intention shows a part correlation coefficient of .340. When squaring this number it becomes .1156, meaning the variable behavioural intention uniquely explains 11.56% of the variance in attitude toward advertising. Perceived utility entertainment shows a part correlation coefficient of .134, meaning the variable uniquely explains 1.79% of the variance in attitude toward advertising. The variable social norms show a part correlation coefficient of .093, meaning the variable uniquely explains 0.86% in the variance in attitude toward advertising.

4.1.4 Two-Way Anova Analysis

A two-way Anova was run in order to explore the impact of gender and age on consumers’ attitudes toward mobile advertising. Subjects were divided into two groups according to their age (Group 1: 15-21 years; Group 2: 22-29 years). The results of this analysis are shown in appendix 6. Within this two-way Anova a Levene’s test of equality of error variances was made. According to Pallant (2005), this test provides a test of one of the assumptions underlying analysis of variance. Within this test it is important to look at the significance level, this level has to be greater than .05 in order not to be significant. The significance level of the Levene's test used for this research is .067, which is higher than .05 and therefore it can be concluded that the homogeneity of variances assumption has not been violated.

In order to be able to easily and simply interpret the main effects, one first has to find out whether there is no significant interaction effect between the independent variables. This can be found in the table of tests of between-subjects effect within the two-way Anova analysis shown in appendix 6. Within the SPSS output the value of age*gender has to be greater than .05. When this value is less than or equal to .05, then there is a significant interaction effect (Pallant, 2005). Within this research the value of age*gender is .430, meaning the interaction effect is not significant, which is shown in table 16. This indicates that there is no significant difference in the effect of age on the attitude toward advertising for males and females. As there is no significant
interaction effect, the main effects can be safely interpreted. The main effects are the simple effect of one independent variable, in this case age and gender individually. To determine whether there is a main effect for each individual variable, one has to look at the column marked Sig. for each individual variable (Pallant, 2005). If the value is less than or equal to .05, there is a significant main effect for that independent variable. In this research age has a significance level of .130 and gender has a significance level of .525, meaning that both gender and age do not have an effect on the scores of attitude toward mobile advertising, which is shown in table 16.

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial R² Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>6,821</td>
<td>3</td>
<td>2,274</td>
<td>1.632</td>
<td>.185</td>
<td>.035</td>
</tr>
<tr>
<td>Intercept</td>
<td>955.344</td>
<td>1</td>
<td>955.344</td>
<td>254.973</td>
<td>.000</td>
<td>.654</td>
</tr>
<tr>
<td>Age</td>
<td>3,241</td>
<td>1</td>
<td>3,241</td>
<td>2.828</td>
<td>.180</td>
<td>.017</td>
</tr>
<tr>
<td>Gender</td>
<td>.566</td>
<td>1</td>
<td>.566</td>
<td>.408</td>
<td>.525</td>
<td>.003</td>
</tr>
<tr>
<td>Age * Gender</td>
<td>.074</td>
<td>1</td>
<td>.074</td>
<td>.627</td>
<td>.480</td>
<td>.095</td>
</tr>
<tr>
<td>Error</td>
<td>188.143</td>
<td>128</td>
<td>1,394</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>194,964</td>
<td>129</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 16. Tests of Between-Subjects Effects.

4.2 Qualitative Data

In order to gather more information on consumer attitudes toward mobile advertising, two focus groups were held. The topic guide and transcripts of the focus groups can be found in appendices 2, 3 and 4. The respondents were first asked on their attitude toward mobile advertising without any explanation on the topic, which resulted in extremely negative attitudes toward this marketing phenomenon. Then a discussion was started on the negative and positive sides of mobile advertising, where all components of mobile advertising were covered.

The results of the negative sides of mobile advertising mainly focused on consumers being afraid of losing privacy on their mobile phones as the respondents all said they were afraid of receiving too many advertisements. Furthermore, advertisers tend to send out very personalized messages through mobile phones which makes consumers feel awkward because the advertiser seems to know too much about them. However, irrelevant advertising tends to be perceived as annoying because customers do not want to be bothered with information that is useless to them. These two statements contradict each other as customers see personalized advertising as an intrusion of their privacy but they do not want to receive advertising that is irrelevant to them. Another contradiction in attitudes toward mobile advertising was found in the discussion on geo-location. The respondents stated that advertisements send out based on geo-location are useful as they give the consumer something that is useful at that exact moment, however all respondents also stated being afraid of being bombarded with advertisements due to geo-location based advertising. This showed that geo-location can be both perceived as positive as well as negative. The respondents stated that geo-location based advertisements will be mainly perceived as positive when it gives something to the customer at that specific time, for example receiving a free item when showing the advertisement.
The main positive point of mobile advertising in comparison to regular advertising turned out to be its interactivity. Mobile advertising allows advertisers to include games and videos in the advertisements making mobile advertising more entertaining than traditional forms of advertising. Through the focus groups was also found that the content and entertainment level of the advertisement have most impact on how consumers perceive the advertisement. As said in the first focus group: ‘Advertisements need to be original, but this is very difficult nowadays, however it does still happen’. This originality in mobile advertisements mainly comes from the interactivity of the advertisements. When looking at the content of the advertising messages the respondents talked about receiving advertisements relevant to them, containing up to date information, or advertisements that gave something in return right away, like coupons or free products. Considering the content of the advertisement the respondents mainly looked at what the value of the advertisement would be to them. Advertisements send out through mobile phones should not focus on gaining brand recognition but should offer a certain value to the consumer, like new product information or special offers. The respondents said it is important for the consumer to feel as if the advertisement is about him, which again shows the contradiction with respondents feeling awkward when advertisers know too much about them.

Furthermore, the respondents claimed permission to be an important factor on how mobile advertising is perceived by the consumer. Permission based advertising tends to be more accepted because the consumers know they have agreed upon receiving the advertising. Permission based advertising could be a consumer allowing a certain company to send out advertisements by for example providing the company with a telephone number or by agreeing upon receiving advertisements when downloading an application free of charge. This complies with the fact that the respondents said in-application advertising is not disturbing to them. The respondents said it is important for the consumer to feel as if they are in charge on what messages they receive on their mobile phones.

After all dimensions of mobile marketing were discussed the respondents were asked again what their attitudes toward mobile marketing were. In both focus groups the attitudes turned out to be a lot less negative and one respondent even claimed the negative attitude he had at the beginning was entirely wrong. The final attitude of consumers toward mobile advertising depends a lot on how companies use this form of advertising. As long as the advertisements are entertaining, provide the customer with value, and are send based on permission, the attitudes of the consumers tend to be quite positive toward the advertisement.
5 DISCUSSION

The main model used for the analysis of the data in this research is the model ‘Model of Consumer Acceptance for Mobile Marketing’ of Bauer et al (2005). According to this model a consumer’s attitude toward mobile advertising is influenced by its innovativeness and existing knowledge of mobile advertising, whether the consumer is an information seeker and its attitude toward advertising in general, the perceived utility and risk of mobile advertising, social norms, and the consumer’s behavioural intention.

5.1 Consumer-Based Acceptance Drivers

The consumer-based acceptance drives are comprised of the components innovativeness, existing knowledge, information seeker and attitude toward advertising. In their research, Bauer et al (2005) claim the results show a very small relationship between the existing knowledge and innovativeness of the consumer and its attitude toward mobile advertising, meaning no further implications with these two components could be made. The results from this research showed the same as the research of Bauer et al (2005), both existing knowledge and innovativeness show some relationship with the final attitude toward mobile advertising, however the relationships are not significant enough to use in further implications.

Bauer et al (2005) show the components information seeker and attitude toward advertising have a relationship as low as existing knowledge and innovativeness with the attitude toward mobile advertising, meaning also no further implications could be made with these factors. However, the results of this research show both the component information seeker as well as the component attitude toward advertising to have a strong positive relationship with attitude toward mobile advertising.

5.2 Innovation-Based Acceptance Drivers

The innovation-based acceptance drivers are comprised of perceived utility and perceived risk. Perceived utility showed a very strong relationship with attitude toward advertising in the research of Bauer et al (2005). Their research showed perceived utility entertainment to have the biggest impact on attitude toward mobile advertising whereas perceived utility social showed the lowest impact on attitude toward mobile advertising. The results of this research also showed perceived utility to be an important factor when looking at consumer attitudes toward mobile advertising, however less differences were found between the impact of the three different components compromising perceived utility. Entertainment also showed to have the biggest impact on consumers’ attitudes, however within this research social showed to have slightly more impact on consumer attitudes toward mobile advertising than information did. Even though the statistical analysis showed the dimension considering information to have the least impact of the three, the results from the focus group showed this dimension to still be of huge importance. When discussing what aspects are important according to the respondents, the discussion kept returning to the fact the advertisement has to be of value to the consumer. The advertisement either has to contain relevant information or provide the consumer with a special offer, such as receiving a free item or coupon, in order for the advertisement to be perceived as positive.
In their research Bauer et al (2005) confirmed the negative relationship between perceived risk and consumer attitudes toward mobile advertising. This research also showed a negative relationship between the two components, however this relationship is not very strong. The main concerns in both results showed consumers are afraid of losing privacy and receiving too many messages.

5.3 Acceptance

Acceptance is comprised of social norms and behavioural intention. Bauer et al (2005) show the component social norms has a strong positive relationship with the attitude toward mobile advertising, however not as strong as the relationship shown by perceived utility. Within this research this positive relationship has been confirmed, the results from this study even show a relationship similar of strength as the relationship between perceived utility and attitude toward advertising.

The component behavioural intention showed the strongest relationship with attitude toward mobile advertising in the results of Bauer et al (2005). This means a consumer’s attitude toward mobile advertising can be best predicted by one’s intention to use this form of advertising. This strong relationship has been confirmed by the results from this research.

5.4 Permission-Based Advertising

From the focus groups was also learned that Dutch consumers find it important to have given permission for companies to send advertisements to their mobile phones before receiving any. This dimension has not been acknowledged by Bauer et al (2005), however it has been discussed by both Mir (2011) and Tsang et al (2004). Therefore, before sending out commercial messages through mobile phones to Dutch consumers it is important for companies to have asked for permission upfront.

5.5 Youth in Other Countries

In table 17 an overview is given on the main findings on research on consumer attitudes toward mobile advertising, focusing on youth, in other countries. From this table can be seen that the attitudes of the American youth show similar characteristics as the Dutch youth. The advertising messages have to be entertaining and contain valuable information in order for the advertisement to be perceived positively. Furthermore, the consumers like receiving incentives in the advertisements like coupons or free items such as ringtones. The main risk perceived by both target groups is receiving too many messages.

The analysis of the Asian youth’s attitudes toward mobile marketing mainly showed contrasting factors with the attitude of the Dutch youth. In Asia credibility of the source and message are important in order for consumers to perceive the advertisement positively, whereas entertainment within mobile advertisements is not attractive. However, consumers from emerging markets were shown to be more likely to accept mobile advertising than were consumers from established markets.
The study on the South African youth showed social influences to be of most importance in accepting mobile advertising. Even though this dimension does not show the greatest influence on mobile advertising acceptance among the Dutch youth, it still showed to have a significant influence. The study of Radder et al (2010) showed there is no relationship between perceived risk and mobile advertising acceptance. There is a relationship shown between these dimensions in this current research, however this relationship is very small. A difference between the results on the study of the South African and Dutch youth is that the acceptance of the South African youth is influenced a lot by the consumers’ innovativeness, whereas there was only a small relationship shown between these dimensions in this research on the Dutch youth.

<table>
<thead>
<tr>
<th>Author</th>
<th>Study Country</th>
<th>Major Finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chowdhury, Parvin,</td>
<td>Bangladesh</td>
<td>College students’ attitudes toward mobile advertising were influenced mostly by the credibility of the messages. Entertaining and informative messages were not attractive.</td>
</tr>
<tr>
<td>Weitenberner &amp; Becker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2006)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hanley, Becker &amp; Martinsen</td>
<td>U.S.A.</td>
<td>College students were willing to accept mobile advertising if they were given incentives. Free ringtones and airtime were the most popular incentives.</td>
</tr>
<tr>
<td>(2006)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peng (2006)</td>
<td>China</td>
<td>College students’ acceptance of mobile advertising was affected by content credibility, product profile, personalization, previous experience, privacy, and permission. Content credibility was the most important element.</td>
</tr>
<tr>
<td>Rohm &amp; Sultan (2006)</td>
<td>U.S.A. and Pakistan</td>
<td>College students’ behavioural intentions to engage in mobile advertising were affected by usage characteristics, privacy vulnerability, privacy concern, personal attachment, social influence, attitudes, consumer innovativeness, and permission. Students from emerging markets were more likely to accept mobile advertising.</td>
</tr>
<tr>
<td>Jun &amp; Lee (2007)</td>
<td>U.S.A.</td>
<td>College students’ attitudes toward mobile advertising were influenced by mobility, convenience, and multimedia service. These students’ attitudes were in turn directly linked to their behavioural intentions for mobile advertising.</td>
</tr>
<tr>
<td>Newell &amp; Meier (2007)</td>
<td>U.S.A.</td>
<td>College students’ justifications for accepting mobile advertising consisted of novelty, and information and entertainment value. Their justifications for rejecting mobile advertising consisted of concerns about excess messaging, and technical and pricing limitations.</td>
</tr>
<tr>
<td>Hanley &amp; Becker (2008)</td>
<td>U.S.A.</td>
<td>Text messaging remained the most pervasive mobile content application. The perceived risks of receiving mobile advertisements were not a barrier to advertising acceptance.</td>
</tr>
<tr>
<td>Wais &amp; Clemons (2008)</td>
<td>U.S.A.</td>
<td>College students preferred to receive promotional mobile messaging from a relevant person such as a friend rather than a company. They were more likely to perceive</td>
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promotional messaging positively if it came from a relevant person instead of a company.

| Radder, Pietersen, Wang & Han (2010) | South Africa          | The main influencer of consumers’ behavioural intentions are social influences. Furthermore, these intentions are influenced by attitudes toward mobile advertising, innovation levels and perceived study utility. This research showed there is no relationship between perceived risk and mobile advertising acceptance. |

Table 17. Youth other Countries.
6 CONCLUSION

The results of this study showed the Dutch youth mainly sees the originality, interactivity and entertainment levels of mobile advertising as positive in comparison to traditional forms of advertising. Furthermore, message content was shown to be an important factor in order for the consumer to perceive the advertising as positive. The message has to be of value to the consumer, meaning it has to contain timely information and preferably provide the consumer with an incentive such as a coupon or free item. Furthermore, the results showed that for an advertisement to be accepted by Dutch youth, the advertiser must have gained permission of the consumer before sending it.

The main aggravating attributes that come with mobile advertising are the perceived risks. This research showed consumers are mainly concerned with receiving too many advertising messages and losing privacy on their mobile phones. The statistical research showed however, that this dimension only has a small negative effect on a consumer’s final attitude toward mobile advertising.

Within this research four consumer-based acceptance drivers have been discussed; innovativeness, existing knowledge, information seeker, and attitude toward advertising. Both innovativeness and existing knowledge showed a positive relationship so small with the final attitude toward mobile advertising, they can be regarded as insignificant. However, both information seeker and attitude toward advertising showed a strong positive relationship with attitude toward mobile advertising. This means the more positive the attitude toward advertising in general is, and the more the consumer likes searching for product information, the more positive the attitude toward mobile advertising will be.

For this thesis, research was done on the influence of age and gender on attitudes toward mobile advertising. However, the respondents were unevenly distributed according to age, so no reliable assumptions could be made with this dimension. A two-way Anova was run in order to find the significant main effect on consumer attitudes toward mobile advertising for both age and gender. However, the analysis showed that both dimensions made no significant difference in consumer attitudes toward mobile advertising.

The main purpose of this research was to find out what the attitudes of the Dutch youth are toward mobile advertising. The statistical results of the analysis of the questionnaire showed a negative attitude toward mobile advertising. The results of the focus group however, showed that when mobile advertising is used in a proper way, consumers’ attitudes can be positive. The advertisements send out have to be original and entertaining, and be of value to the consumer by, for example, providing an incentive. Furthermore, the advertiser must have been granted permission by the consumer to send the advertisement, as the Dutch youth does not appreciate receiving unsolicited messages on their mobile phone.

6.1 Practical Implications

In order for a company to run a successful mobile advertising campaign, the advertisement needs to be adjusted to the consumers’ needs. This research has shown that the advertisements need to be original, entertaining, and be of value to the consumer. Furthermore, advertisements should
not be send out before permission has been granted by consumer. The main perceived risk for consumers is receiving to many advertising messages, therefore the advertisers should limit the amount of advertising send out through mobile phones.

6.2 Future research

This research is focused on the attitudes of the youth toward mobile advertising. However, with the older generation making much use of mobile phones as well, we think it would be interesting to find out what the contrast is between the attitudes toward mobile advertising of the younger and older users of mobile phones.

Furthermore, this research is completely focused on an established market with high technical knowledge. Therefore we think it would be interesting to find out differences on attitudes toward mobile marketing between emerging and established markets and why these differences appear.

6.3 Limitations

The needed sample size in order to make fully reliable implications on the entire market was calculated to be 384 with a reliability level of 95%. This research analysis was done with a sample size of 139 usable respondents, making the implications less reliable.

Furthermore, the distribution of age among the respondents was not equal. Which makes the implications regarding the influence of age less reliable.
7 REFERENCES


APPENDICES

Appendix 1. Draft Questionnaire

<table>
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<tr>
<th>#</th>
<th>Statements</th>
<th>Item</th>
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<td>Gender</td>
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<tr>
<td>2</td>
<td>Age</td>
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<td>3</td>
<td>Do you have a smartphone?</td>
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<td>Usually I am among the first to try out a new product</td>
<td>IN1</td>
<td>Oliver and Bearden (1985)</td>
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<td>5</td>
<td>Often I try new products before my friends do</td>
<td>IN2</td>
<td>Leavitt and Walton (1975)</td>
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<td>6</td>
<td>Generally, I enjoy buying new products</td>
<td>IN3</td>
<td>Darden and Perrault (1976)</td>
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<td>I have a profound knowledge about mobile communications</td>
<td>EK1</td>
<td>Flynn and Goldsmith (1999)</td>
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<td>In comparison to my friends I am an expert in mobile communications</td>
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<td>In my circle of friends I am usually the first who knows about the latest</td>
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<td>10</td>
<td>I enjoy reading different advertising for the sake of comparison</td>
<td>IS1</td>
<td>Raju (1980)</td>
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<td>I tend to read a lot of different advertising just for the sake of a</td>
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<td>Raju (1980)</td>
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<td>change of pace</td>
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<td>12</td>
<td>I tend to read advertising in my spare time</td>
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<td>Self-created</td>
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<td>Generally I find advertising a good thing</td>
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<td>I like advertising</td>
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<td>Through advertising messages via the mobile phone I receive</td>
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<td>Bauer et al (2005)</td>
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<td>The advertising messages customized to my profile are useful</td>
<td>PU3-Inf</td>
<td>Bauer et al (2005)</td>
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<td>I find advertising messages via the mobile phone exciting</td>
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<td>The interactiveness makes mobile advertising fun</td>
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<td>By using advertising messages via the mobile phone I can</td>
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<td>demonstrate my innovativeness to my friends</td>
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<td>There is a risk of personal data being misused when using mobile</td>
<td>PR1</td>
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<td>There is a risk of losing privacy on my mobile phone when using mobile marketing services</td>
<td>PR3</td>
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<td>If I use mobile marketing services most of the people who are important to me will regard me as clever</td>
<td>SN1</td>
<td>Shimp and Kavas (1984)</td>
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<td>28</td>
<td>If I use mobile marketing services most of the people who are important to me will regard it as useful</td>
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<td>Shimp and Kavas (1984)</td>
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<td>29</td>
<td>If I use mobile marketing services most of the people who are important to me will regard it as valuable</td>
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<td>I find receiving advertising messages via the mobile phone positive</td>
<td>AACT1</td>
<td>Shimp and Kavas (1984)</td>
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<td>I appreciate receiving advertising messages via the mobile phone</td>
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<td>I would read all the mobile advertising messages I receive in the future</td>
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<td>35</td>
<td>I will use mobile marketing services in the future</td>
<td>BI3</td>
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Appendix 2. Topic Guide Focus Group

This focus group is for our thesis. In our thesis we focus on advertising, and mobile advertising specifically. But first we would like to know more about your opinions on advertising in general. So how do you look at advertising in magazines, on the radio, on television?

Now we turn to mobile advertising. In our thesis we focus on advertising through mobile phones, or to say ‘mobile advertising’. Nowadays more and more companies have to deal with advertising clutter, causing companies to focus on mobile advertising in order to break through this clutter and a better focus can be given to each individual consumer. Now our question to you is, when you think of mobile advertising, what characteristics do you link to this form of advertising?

Can you come up with more attributes linked to mobile advertising?

We also have a few other characteristics of mobile advertising which we found through our literature research.

Interactivity → advertising on your mobile phone can be made more interactive than for example a printed advertisement.

Entertainment → Advertisements can for example be turned into games and mostly mobile advertisements tend to be funnier than other advertisements, making them more entertaining to look at.

Risks → People are afraid of the risk of losing privacy on their phone due to the advertising they would receive on their mobile phone.

Next to geo-location companies can also keep time in mind when sending out advertisements → This gives companies the opportunity to send out messages at times relevant to their product group, for example a supermarket sending out an advertisement on Saturday morning, when a lot of families do their shopping. This makes sure you, as the customer, receive the advertisement at a moment where it is relevant to you.

Message content → We found out this is one of the most important components of a mobile advertisement. This component focuses on what information is provided in the advertisement and whether it is relevant for me at that point in time.

When looking at these components, do you have anything to add or say about these components?

So, in the past you could regularly receive sms text messages, nowadays more mms text messages and in-app advertising, have you ever received such advertising on your mobile phone?

And when you receive these advertisements, how do you react to it?

Like said before, mobile advertisements come in the form of sms and mms messages, at the moment the most used form is in-app advertising, of which an example is the ad of land rover...
shown here. What they did is you get a small bar of with the advertisement shown at the bottom of this weather application, and when you touch it, it folds out on the entire screen. So you only have to see this advertisement when you actually want to see it. What do you think of such a way of mobile advertising?

When thinking of mobile advertising, consumers tend to have an overall negative attitude. However, can you think of some positive characteristics of mobile advertising?

And if you think of the most negative sides of mobile advertising? What would these be?

Okay. Well, like we said before, companies can also send advertisements in sms or mms text messages on a time logical for that advertisement. For example during grocery shopping or when watching or playing sports, you receive a relevant advertisement. Would this have any effect on how you would perceive the advertisement, positively or negatively?

Well, next to time companies also make use of geo-location. Here I have an example of such an advertisement. This one is of the Wynn Hotel in Las Vegas. As soon as you enter their hotel you receive this advertisement offering you a free glass of champagne when you show the message at the bar. This advertisement is then used to keep you in their hotel. What would you think of such an advertisement?
So you think when you give them time for reading the advertisement, you would like to get something in return?

Another characteristic of mobile advertising is its interactivity. In the past this was mainly done through sms text messages which limited the interactivity, nowadays with mms messages companies can make more use of interactive advertisements. Here I have got an example of an old fashioned interactive sms advertisement where you would have to send a text back in order to receive a coupon. But now, you for example have this advertisement of Campbell Soup. First they send you a memory game, than you get to choose the main ingredient you want to use in your food and after that you would get a recipe. When completing all these steps Cambell Soup would send you a discount coupon. What do you think of this interactivity in advertisement? Do you like it or do you think it is negative?

Old interactive sms      Nowadays new form of interactive applications
We also have the originality of the advertisements. Mobile advertisements tend to be a lot more original, of course also due to the interactivity. But they tend to be more original than printed ads etc. A company that used this originality in its mobile advertising campaign is Snickers. They had a television commercial running starring B.A. of the A-team, I do not know whether you have seen this? (All) Yes! What Snickers did is they made wallpaper for on your phone with B.A., which you can see here. If they had your number they would send you the wallpaper which you could download onto your phone, and you could also send this to your friends. Hereby Snickers could not only reach their current customers but also potential customers, like a snowball effect. If you would receive such an advertisement, not necessarily this one but one of interest to you, would you show this to friends or forward it to them?

And would you download such wallpaper?

So we now talked a bit more about mobile advertising. In the beginning you all had quite a negative attitude toward mobile advertising, saying you do not want any advertising on your phone. Now we have talked about it a bit more, discussing on what companies can do with this form of advertising, has your opinion on mobile advertising changed at all?
Appendix 3. Focus Group I

This focus group is for our thesis. In our thesis we focus on advertising, and mobile advertising specifically. But first we would like to know more about your opinions on advertising in general. So how do you look at advertising in magazines, on the radio, on television?

(1) I think advertising is a good idea because it can show you new products or show you what products are on sale or just products you are really interested in and then you can buy them at a discount.
(2) But they have to be good advertisements, because they can be super annoying. They can make you think like 'why??'. A lot of the time advertisements make me feel like ‘seriously?’.
(1) Yes, but it can be that for example your coffee machine broke down, than you see an advertisement on it and then it's relevant.
(2) Yes okay, that’s true.
(3) Advertising in general or advertising on your mobile phone?
Advertising in general.
(3) Than I would like to say there is too much advertising! We are bombarded with advertising.
(4) Yes there is way too much!

Well that is the exact reason we are focusing on mobile advertising, so that was a good point. It is true that there is too much advertising on television and in papers and therefore more companies have started focusing on advertising through mobile phones in order to break through this clutter and a better focus can be given to each individual consumer. Now our question to you is, when you think of mobile advertising, what characteristics do you link to this form of advertising?
(2) You receive too much, as they can reach you too easily. Also they say we treat your personal information with care, I do not believe that because you get way more advertising than you would actually want.
So your privacy on your mobile phone decreases.
(2) Yes exactly.
(1) Nowadays you hardly have any privacy.
(3) Have you ever seen to how many things you agree upon when downloading an application? You agree upon everything! They are allowed to see your telephone status check your accounts.
And what else do you think of when thinking of characteristics concerning mobile advertising?
(1) A lot of spam!
(5) Yes, way too much information!
(6) Also when you have a contract for 100mb internet and companies send you all these pictures everyday your internet capacity decreases very fast.
(4) When I think of mobile advertising I think of two things. The first one is that in applications you tend to have this bar under the running application that is what I see as mobile advertising. And second, in the application market you have this one page showing the hottest applications, so this is advertising for applications themselves.
Do you have any other points you can think of?
(4) Yes, when looking at this advertisement bar shown below an application I really had to get used to not accidentally touching it because than it opens in your full screen. And Google, all nice and well, but after using it you get all this personally based advertising. I think that is annoying because you can see they follow everything you do and then I do not want to remain logged in anymore.
So that has to do with your privacy on your mobile phone?

(4) Yes!

(1) You do not have to be logged in, in order for them to track you. Everything you do on Google owned websites like YouTube and Gmail is automatically saved in some database and based on that some advertisements are send to you. So if you are looking for a house in Antwerp all of a sudden you get all this advertising on Antwerp because Google plays with your demand. I think this is too much. (2) This is also annoying when you want to buy a car, but once you have found one they still send you all the advertisements on cars because you temporarily searched for it a lot. Also sometimes it is completely irrelevant. For example when you watch a movie on YouTube all of a sudden you get an immense amount of advertising before the movie considering mortgages etc. which are not relevant to me. On one side it can be more personal on the other side it is annoying.

So you say it has both positive and negative sides?

(2) Yes.

Do you have anything to add to this?

(5) If I would get such an advertisement I would not look at it because I think it is annoying. (3) I agree on that. That is what I like on android phones. When you open an internet browser Java does not immediately open all these pictures. First you have to push a download button which allows me to ignore the advertising.

Well, we also have a few other characteristics of mobile advertising which we found through our literature research and we would like to see if you have anything to add on those points.

Next to in-app you can also receive advertising through sms and mms texts, which are known to be quite interactive.

(3) That is a long time ago that I have received such a text.

(2) I also have not received this on my smartphone yet.

You also have the interactivity in these advertisements. For example games within the advertisements. Then there is the entertainment component. Mobile advertisements tend to be funnier, mainly because they are also adapted to your personal profile and therefore focus on your interests. Also companies can send out these messages on certain times, it is not a paper which is printed once a week. But really focus on the day and time consumers tend to do certain activities. Geo-location focuses on the location of the consumer, so you would receive an advertisement of the store you just entered. Furthermore we found consumers care most about the content of the message. What information is included, and is this information relevant for me? Can you find yourself in these points?

Yes I understand, but for example when I do groceries I do not want to be bothered with all these advertisements focused on the time I do these groceries, I already have my own shopping list!

(5) Yes that’s true!

So you think time as a filter can be annoying?

(2) Well it can have positive sides, for example if you are on a festival and you get a message saying ‘show this at the bar and get to beers for this price of one’, that would be interesting.

So especially special offers will be perceived as positive?
(2) Yes. Also because in stores all items on sale are showed good enough, I do not need an extra
text for that. So mainly for discounts and special offers.

(6) Also companies’ own applications can be seen as mobile advertising. And for example at the
Time Out bar, they say when you check in here, through Facebook, you get a free coke. And then
I think well sure, and that is good advertising.

So you really need to get something back for it?

(6) Yes. It has to be something I can actually use and what is relevant to me.

(3) And also not that when you for example enter a real estate agency that you get 30 different
advertisements on mortgages.

Than it would become too much?

(3) Yes.

Have you ever received any form of mobile advertising, in an sms or mms message or within an application?

I never received this.

(2) On my old phone I would receive mms messages of my provider saying what new ser-

vices they had.

But not from other companies?

(1) That is minimal.

(3) Me neither.

(2) Also when you receive it you do not do that much with it.

I do not know how the others react to receiving such messages. Apparently you do not react to it that much. But is
this different for you?

If it is something I really need that I would read it. Because than I think like hey I need this, than
I can actually use it.

(2) But I also know that for example Amstel always makes good commercials so if I would
receive something from them I would look at it. Because it would be interesting to see what they
came up now.

So than it would be the entertainment factor of it is just fun to look at?

(2) Yes.

(6) But than you would need to have the time to actually look at it.

When looking at mobile advertising, companies can use sms messages, but these are not used that much anymore.

Also companies can make use of mms messages, which use has been rising, but not on your phones apparently.

However, the most used form is in-app advertising, of which I have an example of Land Rover here. Here you have
a small bar at the bottom of the app and when you tap it the advertisement comes up and fills the entire screen. So
in this form of advertising you only get to see the full advertisement when you ask for it. What do you think of this
form of advertising?

This is the most usual form of mobile advertising to me. This is the form of advertising
companies use to advertise through mobile phones.

You mostly find this form of advertising in applications free of charge, what do you think of that?

(2) I understand they need it in order to run these applications. But this also is not annoying
because when you do not want to see it you just ignore it.

(3) That is also the trade-off you have to keep in mind, either you pay for it and you do not have
applications or you download it free and get advertisements along with it. When I do not pay I
am open to receiving advertisements. Also, it is just a small bar, so if you want to you can just
ignore it.
That is also not annoying.

What do you think to be positive about mobile advertising?
Yes, for example when you need something and you then receive an advertisement about that you will be more interested. But when you do not need it, you will not be interested.

So in this case personal profiling would actually be perceived more positively?
(6) Because it is send out at the right time.

So sending out messages at the right time has negative sides, like you said earlier with receiving too many advertisements, but also in order for an advertisement to be perceived positive it has to be send out at the right time?
(4) Well yes but for example it is more when you are browsing and for example looking for a restaurant and then you get advertisements based on restaurants in the city you are in then you will think that it is interesting. But if you are just playing on your mobile phone and you get a random advertising for example on insurances, than I think please get off of my phone.
(3) Yes indeed. So at what moment do you send out what advertising is important.
(2) Yes.

So time is important in mobile advertising?
(3) Yes that actually is an important factor. And also, if you want my attention, you have to give current information. For example think of how and when people start sharing videos, like now with the 'push to add drama' campaign in Belgium, everyone is sharing this video.

So the advertisement also has to be fun?
(5) It has to be very original, but that is very difficult in these times.
(2) But it still happens.

And when looking at the negative side of mobile advertising. You already said you are afraid to receive too much, but what do you consider to be the main negative points of mobile advertising?
When they are not focused on your demands. For example when I get advertisements on cars and insurances etc.

Irrelevant advertising?
(2) Yes.

(4) Yes I agree. For example when you read news on an application all of a sudden you get this video with an advertisement on come and insure yourself here with a sound that you can never turn of. That is annoying.

So mobile videos are also annoying?
(5) Yes for example when you look at videos on YouTube you first have to look at a commercial before you can watch the video you want and you cannot skip this.

Then also advertisements that you are forced to look at are annoying?
(3) Yes definitely.

Then the next question. What are important characteristics of mobile advertising in order for you to perceive the advertisement as positive?
Relevancy.
(1) Entertainment and originality.
So mainly the entertainment level and the message content?
(2) Yes.
(3) Yes and the value of the advertisement, like is it of any use to me? If it is just to get name recognition I do not feel personally involved with it. It should appeal to me. This is very difficult for the advertiser of course, but it is what the consumer wants in the end, to get the feeling it is about him.

Okay. Then I have another picture to show you. We have shortly talked about geo-location. With geo-location you should think of walking right past or into a store and receiving an advertisement at that point. I have an advertisement here from Las Vegas of hotel the Wynn. When walking into this hotel you immediately receive a message saying you will receive a free glass of champagne when showing the message at the bar, which they of course do to just keep you in their hotel. What do you think of this form of advertising?

I think this is better!

(2) Yes definitely. This is more focused on you as an individual. You already walk in there to do something and then when you get something extra that’s fun. You already went there so you might as well stay.

(1) Yes.

In Amsterdam they are using this form of advertising more often now, so when you walk past a store you would receive such an advertisement with current offers, for example they use this at the Nike store. What would you think of that?

(2) Just walking by a store would be too much, for example driving by in a train and then receive advertisements would be annoying.

Of course, but when actually walking right past the entrance or when entering the store?

(2) If you walk into the store okay, but when just passing then it would be annoying.

(3) And how does this work? With Wi-Fi?

This works with mobile networks like Wi-Fi etc.

(4) Yes, when you are connected to the network they can locate you.

(3) But how do they get permission to do this?

(4) This is just turned on, you have to switch it off if you want to.

(1) So in other words, you cannot walk safely through the city anymore or you are bombarded with messages soon!

(4) Everybody knows where you are.

(1) But this form of advertising is also too pushy. For example if all stores in a street do this, you get way too many messages.

(5) Yes.

(1) This would drive you crazy as it is just too much.

(3) Yes.

(1) At the moment you can turn it off or on or when you have an application you are using that you can use for free by allowing the advertisements you give permission to the companies to send it, then it is okay.

So it also depends on whether you give permission to companies?

(1) Yes, but now it is automatically turned on so you just get the advertisements without permission.

(2) This also turns it negative because you start feeling like ‘oh yes I have passed that Nike store again, another advertisement’. Then you might start feeling like I’d rather go to Adidas because you get too much.
Exactly.

With printed ads it is easier to skim through what you think is interesting so you can select what you want to read.

So with mobile advertising you are afraid of receiving too much information you are not interested in?

Yes.

Maybe an option could be to have consumers select in what categories they would like to receive advertisements. For example you only select home appliances, than you only receive advertisements considering these products. Than you could say I am interested in these products and not in everything this shopping street has to offer.

So only the products you give companies permission for?

Yes.

Yes, only certain product groups. If I am not interested I do not want to receive information, this will be seen as spam.

But if you are interested in a product like a car, once you bought a car you have to go through all these steps to get rid of car advertisements. That would be annoying. Or when they just ignore that you disabled that product group.

So you would also again be scared of losing privacy and getting messages you do not want to receive?

Yes and that you have to go through a lot of trouble to get rid of the messages.

Or there should just be a list where you can cross what you are interested in and if you are not interested anymore you delete it.

Than the next characteristic. Mobile advertisements can be made a lot more interactive than printed ads. In the past this was only done through sms messages, which you probably all have received at some point in time.

Nowadays this is more often done through mms messages or in-app advertising. The interactivity in sms messages was quite limited, I have an example here on this picture. The consumer was send a message, asking for a response and when the consumer would respond he would receive a discount coupon. But now, you for example have this advertisement of Campbell Soup. First they send you a memory game, than you get to choose the main ingredient you want to use in your food and after that you would get a recipe. When completing all these steps Campbell Soup would send you a discount coupon. What do you think of this interactivity in advertisement? Do you like it or do you think it is negative?

Yes.

Yes, but also because it gives you the coupon and not when you have finished the game that that was it.

So it actually is very important for the advertisement to be of value to the consumer?

Yes, it must provide me with something. If it would be just the game I would use it for entertainment only, but not because of the brand.

So interactivity also brings entertainment?

Yes.

For example if you have 10 different companies doing the same they have to come up with something to attract the customer otherwise the customer might just as well go to the competitor.

You have to be different from your competitors.

In this way you can give something back to the customer. And it is also fun so you can differentiate yourself from the rest.

You give the companies your time so you want something in return.
What a lot of companies also try to achieve with mobile advertising is for the receivers of their message to forward this to their contacts, like a snowball effect. This however only works with the real original advertisements of course. Therefore this would be difficult with sms messages, but Snickers tried to do this using mms messages. I have got a picture of their advertisement here. They had a television commercial running starring B.A. of the A-team, I do not know whether you have seen this? (All) Yes! What Snickers did is they made wallpaper for on your phone with B.A., which you can see here. If they had your number they would send you the wallpaper which you could download onto your phone, and you could also send this to your friends. Hereby Snickers could not only reach their current customers but also potential customers, like a snowball effect. If you would receive such an advertisement, not necessarily this one but one of interest to you, would you show this to friends or forward it to them?

Yes, yes I would
(1) Maybe.
(2) If it would be a funny one I would.
So it has to be original?
(3) Yes.
(1) But I think you get tired of it soon, if you keep seeing this snickers picture you will want to have something new again. However, if you could get several pictures it would be better.
So this would be something temporarily?
(1) Yes, definitely temporarily. Maybe you would have it for a week as a new trend, but then you would change it again. Also because maybe too many others would have it as well.

We now talked a bit more about mobile advertising. In the beginning you all had quite a negative attitude toward mobile advertising, saying you do not want any advertising on your phone. Now we have talked about it a bit more, discussing on what companies can do with this form of advertising, has your opinion on mobile advertising changed at all?

(2) As long as you can control what you get and when you get it and how many advertisements you receive than it is okay, but if you get too much it is annoying. But if you would get a message on Friday afternoon saying this weekend we have this offer or at a festival where you show the advertisement at a stand in order to receive something than it could be fun.
Okay, so it should not be too much and it has to be of some value to you?
(2) Yes.
(5) Some time ago I downloaded an application but an android phone you have a status bar at the top of your regular screen which shows whether you have new text messages etc., but due to this application I all of a sudden received advertisements here. That was very annoying as I really did not want this, so I searched for the application and deleted it. I have to have some control over what I receive. We already see enough advertising.
(1) I would like to see some sort of on/off button with which I can choose what sort of advertising I receive. If I do not feel like receiving any advertisements right now I turn it off, if I want to see what is going on in the city tonight, I can ask for that information.
So everything you receive should be based on permission?
(1) Yes.
(3) Yes and relevance of the advertisement, even though you have to give in on your privacy in order to do this. Some people are totally open to this and willing to share everything with you, but others are not. Also, companies know that the market share of smart phones is still increasing, and they have to play in to this. This makes it impossible to not receive any advertising on your phone, so than at least the consumer should have some control over it.
(2) Yes, like I understand when I download a free application that I will receive advertisements but a lot of the time these are American advertisements which are totally not relevant to me. Than I do not pay any attention to it.

(6) Yes, also now we are here in Sweden we all of a sudden receive Swedish advertisements, but I do not understand them, so I do not know what to do with it.

(2) They are totally not relevant.

So it is important for the advertisements to be of relevance, not too much, and only when you give permission for companies to send them?

(2) When I have control over it, it seems to be more positive then when I just receive it.

(3) It seems funny what we say here, we care a lot about our privacy but at the same time we want the advertisements to be as relevant as possible which actually cuts into your privacy.

(4) Yes but if you can say I want to have information on these product groups and not on these, companies do not get to choose, it is your own choice.

(3) Yes but those choices or temporarily, we keep changing our opinions on what we need.

(4) Therefore you need to be able to decide on what is relevant to you.

(1) Maybe it would be good to be able to make an update every month so it is always up to date.

Appendix 4. Focus Group II

This focus group is for our thesis. In our thesis we focus on advertising, and mobile advertising specifically. But first we would like to know more about your opinions on advertising in general. So how do you look at advertising in magazines, on the radio, on television?

(1) I actually skip over it or read it through passively.

(2) Advertising is only interesting when the product is of relevance to me or when it is funny. However, I never look at advertising in advertising papers and magazines as this form of advertising is annoying, I only look at advertising on TV, this can actually be inspiring when you see something interesting.

And do others have other opinions?

(3) I do not have a problem with advertising at all.

Ok. Than we now turn to mobile advertising. In our thesis we focus on advertising through mobile phones, or to say ‘mobile advertising’. Nowadays more and more companies have to deal with advertising clutter, causing companies to focus on mobile advertising in order to break through this clutter and a better focus can be given to each individual consumer. Now our question to you is, when you think of mobile advertising, what characteristics do you link to this form of advertising?

Spam!

(2) Personal.

(4) Friends who forward you messages which are interesting.

So that would be the more social aspect of mobile advertising. And can you come up with more attributes linked to mobile advertising?

(4) Annoying!

And why annoying?

(5) Because I am not a person anyhow who would by a product because of its advertising. Therefore I rather avoid advertising, because I know it has no effect on me anyhow. If I would
receive something on my phone I would have a short look at it but not run to the store and buy the product.

(3) I think its fraud.
(2) But that is like spam.
(3) No spam is just annoying, fraud is worse!
(6) And companies now also have started using geo-location, so when you go past a store you receive a message. So they can send you direct messages when passing their store.
(2) Wow that would drive you crazy!
(1) Yes I think so too.
Okay. And any further characteristics or opinions?

(1) You also have this think called FRID where you can also pay with your phone and then the stores know exactly what you buy and when.
(2) Yes, like they do at Albert Heijn supermarket!
(1) I would not use this though.

Well, we also have a few other characteristics of mobile advertising which we found through our literature research. Interactivity → advertising on your mobile phone can be made more interactive than for example a printed advertisement.

Entertainment → Advertisements can for example be turned into games and mostly mobile advertisements tend to be funnier than other advertisements, making them more entertaining to look at.

Risks → People are afraid of the risk of losing privacy on their phone due to the advertising they would receive on their mobile phone.

Next to geo-location companies can also keep time in mind when sending out advertisements → This gives companies the opportunity to send out messages at times relevant to their product group, for example a supermarket sending out an advertisement on Saturday morning, when a lot of families do their shopping. This makes sure you, as the customer, receive the advertisement at a moment where it is relevant to you.

Message content → We found out this is one of the most important components of a mobile advertisement. This component focuses on what information is provided in the advertisement and whether it is relevant for me at that point in time.

When looking at these components, do you have anything to add or say about these components?
Well you also have this app that you can hold your phone in front of you and then the world turns see through. This gives you the opportunity to see exactly what you can find where in a building, for example a department store.

(3) Like Google maps?
(1) No it’s called virtual reality.
Okay. And is there anything you would like to add on the components shown here?
(5) No not really.

So, in the past you could regularly receive sms text messages, nowadays more mms text messages and in-app advertising, have you ever received such advertising on your mobile phone?

No, I have not.
Never? Ok, and you?
(1) Yes, I have received several advertisements.
(4) Yes me too.
And when you receive these advertisements, how do you react to it?
(1) I mostly receive the advertisements when I open applications like Facebook and then the advertisements are in there. Or when you visit a website and then you receive advertisements. But that’s about it.

Like I said, mobile advertisements come in the form of sms and mms messages, at the moment the most used form is in-app advertising, of which an example is the ad of land rover shown here. What they did is you get a small bar of with the advertisement shown at the bottom of this weather application, and when you touch it, it folds out on the entire screen. So you only have to see this advertisement when you actually want to see it. What do you think of such a way of mobile advertising?
That would not be disturbing as it keeps the application free of charge.
(2) Yes, and it is up to you whether you want to see it, so you are not pushed into reading the advertisement, so that is okay.
(1) Yes exactly.
So you choose yourself whether you do something with the advertisement?
(3) Yes!
(5) And it makes sure the application is free of charge.
So you get something in return.
(5) Yes, it keeps it free of charge, but the advertisement should not be put in the middle of the screen though.
You do have that in game applications though, in between separate game the entire field will be used for an advertisement. (6) Yes, but that is in between a game, so that is not that annoying.
(4) And you only receive those advertisements when you are connected to the internet. As long as your internet is turned off they cannot send you those in-app advertisements.
That’s true, for this sort of advertising you need an internet connection. Can I conclude from this that this form of advertising tends to be seen as not disturbing?
(1) Yes!

When thinking of mobile advertising, consumers tend to have an overall negative attitude. However, can you think of some positive characteristics of mobile advertising?
That it keeps a lot of products on your phone free of charge!
(2) I cannot really think any. I think, personally, that mobile advertising is just disturbing.
(1) I think it can be interesting, for example with the virtual reality that you hold your phone in front of you, you can see what the store has to offer. I have this on my IPhone, it shows what the store sells and what is on sales etc. I think this is super interesting.
Probably this is also used just for entertainment?
(1) Yes of course!
(4) That is actually very useful!

And if you think of the most negative sides of mobile advertising? What would these be?
Companies should not disturb me with unwanted messages, it has to be my choice whether I receive the messages.
(3) Yes I agree, you are pushed too much by companies to read their advertisements.
So you would like to give permission to companies in order to receive any advertisements?
Yes, because your phone is for private use and companies should not just get into that. Does this mean you are afraid to lose your privacy?

Yes, like for example that another person decides on what happens on your phone.

Okay. Well, like we said before, companies can also send advertisements in sms or mms text messages on a time logical for that advertisement. For example during grocery shopping or when watching or playing sports, you receive a relevant advertisement. Would this have any effect on how you would perceive the advertisement, positively or negatively?

I think it has a positive effect. Because it could be that you are shopping, than you receive an advertisement and you are reminded that you for example forgot to buy it. So I would perceive it as less disturbing. And do you have other opinions?

It should not become too much.

Yes that is true.

I think it is a bit scary if a company would send me a message when I am at their store or doing something similar at that time, it seems they know everything about me.

So this also interferes with the privacy on your mobile phone?

Yes it does. They do not have to know where I am and what I do.

It has to remain your choice whether you receive it.

Yes, for example if I say I am here, do you have any advertisements for me, than it would be good as I ask for it.

So the fact of allowing companies to send advertisements remains important?

Yes for sure.

Well, next to time companies also make use of geo-location. Here I have an example of such an advertisement. This one is of the Wynn Hotel in Las Vegas. As soon as you enter their hotel you receive this advertisement offering you a free glass of champagne when you show the message at the bar. This advertisement is then used to keep you in their hotel. What would you think of such an advertisement?

Great, because you get a free glass of champagne.

That is real customer service.

So the fact you get something back immediately affects your attitude?

Yes because they give something back.

Smart!

Yes.

Because you just use the advertisement to get customers inside and make sure they stay in and then they will spend money.

So the fact they give something away gives you a more positive attitude toward the advertisement? Yes, people will not mind if they get something for free.

A glass of champagne would make me very happy!

I think consumers will always think an advertisement to be more interesting when they get something in return.

So you think when you give them time for reading the advertisement, you would like to get something in return?

Yes, I’m not sure if everyone is like that but for me it works like that. I think this is a real good advertisement as they provide a service to their customers.
Another characteristic of mobile advertising is its interactivity. In the past this was mainly done through sms text messages which limited the interactivity, nowadays with mms messages companies can make more use of interactive advertisements. Here I have got an example of an old fashioned interactive sms advertisement where you would have to send a text back in order to receive a coupon. But now, you for example have this advertisement of Campbell Soup. First they send you a memory game, than you get to choose the main ingredient you want to use in your food and after that you would get a recipe. When completing all these steps Campbell Soup would send you a discount coupon. What do you think of this interactivity in advertisement? Do you like it or do you think it is negative? It looks a bit like the idea of pizza hut.

(2) Yes indeed.
(1) I like it.
(3) Me too.
(5) It’s funny.
(1) I also used this to order pizza with my friends.
So the interactivity gives you a more positive image of the advertisement?
(2) Yes I think so.
(6) Yes exactly.

We also have the originality of the advertisements. Mobile advertisements tend to be a lot more original, of course also due to the interactivity. But they tend to be more original than printed ads etc. A company that used this originality in its mobile advertising campaign is Snickers. They had a television commercial running starring B.A. of the A-team, I do not know whether you have seen this? (All) Yes! What Snickers did is they made wallpaper for on your phone with B.A., which you can see here. If they had your number they would send you the wallpaper which you could download onto your phone, and you could also send this to your friends. Hereby Snickers could not only reach their current customers but also potential customers, like a snowball effect. If you would receive such an advertisement, not necessarily this one but one of interest to you, would you show this to friends or forward it to them?

Yes I would, but not to everyone, maybe to 1 or 2 close friends.
And would you download such wallpaper?
(2) No I would not.
And what do you think?
(1) No, I would not do this, not really.
2) I would never do it.
But you would show it to close friends?
(2) Yes just for fun, but not this B.A. poster.
(4) I do not really like wallpapers in general, I just use my own pictures.

So we now talked a bit more about mobile advertising. In the beginning you all had quite a negative attitude toward mobile advertising, saying you do not want any advertising on your phone. Now we have talked about it a bit more, discussing on what companies can do with this form of advertising, has your opinion on mobile advertising changed at all?
(1) I think the negative attitude is actually wrong.
(2) Yes, because you take it too personal.
(1) The negative part depends on how companies do it, like when it is original, based on my personal profile and I have given permission, than it actually is quite good.
So permission is important for you?
(1) Yes, and I think the negative attitude therefore is wrong. But spam and clutter on your mobile phone would be very annoying.

(5) I agree with him partly, I also think it really has to be personalized, and I hate spam anyhow so companies should not push too much. And also when the advertisement is original and fun I would not have a problem with it.

So the originality and entertainment of the advertisement is also very important?

(5) Yes definitely.

(6) You do not want to receive it all day long. You should only receive it of brands and products you are interested in.

(3) I still do not have any problem with mobile advertising, as long as it does not become too much.
Appendix 5. Regression Analysis

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### Variables Entered/Removed

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- All requested variables entered.
- Dependent Variable: Attitude Toward Mobile Advertising

### Model Summary

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- Predictors: (Constant), BI, PR, IN, ATA, IS, SN, PU-Soc, PU-inf, EK, PU-Ent
- Dependent Variable: ATT

### ANOVA

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- Predictors: (Constant), BI, RiskIN, ATA, IS, SN, PU-Soc, PU-inf, EK, PU-Ent
- Dependent Variable: ATT
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a. Dependent Variable: Attitude Toward Mobile Advertising
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* Dependent Variable: Attitude Toward Mobile Advertising

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### Casewise Diagnostics*

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* Dependent Variable: Attitude Toward Mobile Advertising
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**Notes:**
- a. Dependent Variable: Attitude Toward Mobile Advertising
Appendix 6. Two-Way Anova Analysis

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Dependent Variable: Attitude Toward Mobile Advertising

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