



Attitude towards mobile advertising and purchase intention of Swedish customers

A quantitative study on the impact of message content and flow experience

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Abstract

Due to the rapid technological development in information technologies, and mobile phone industry the usage of smart phone became a new trend consequently leading to more than one billion Smartphone users in the world. One of the most significant characteristic of those users is their growing need to be always connected to the Internet. Desire to do not miss important conversation, news, favorite TV series or result of sports events leads them to subscribe for mobile broad band or else use internet-on-the-go. Consequently telecommunication service providers witnessed increasing trend in mobile broad band subscription over the past five years outnumbering access to the Internet via desktop or other fixed broad band alternatives. Telecommunication providers are not the only one who experienced those changes. The crowd of smart phone users is constantly growing, thus on one hand it represents a compelling group of customers to target yet on the other hand due to its novelty it represents an obstacle for marketers and advertisers when executing communication with customers via a new channel, mobile advertising.

Based on market research firms' predictions of future trends in marketing, mobile advertising represent a one of the most effective communication channels due to its measurability, individual targeting via personalised messages and geo-location targeting.

Therefore, in this thesis paper we identified research gap in form of lack of knowledge, that prevents both marketers and advertisers from leveraging the potential of mobile advertising. Designated purpose of this thesis is to investigate role of attitudes and flow experience in mobile advertising. Research question to be answered is: *What is the impact of advertising message personalisation, permission, and flow experience on attitude towards mobile advertising? And consequently examine what is the effect of attitude towards mobile advertising and flow experience on purchase intention of Swedish customers?*

In order to address such an issue we developed theoretical framework and conducted survey among Umeå inhabitants to find out their preferences and experiences with mobile advertising. Collected information were analysed in regards to the theoretical framework consisting of theory of flow experience and theory of reasoned action.

However the data analysis did prove flow of experience theory as well as theory of reasoned action not all aspects did stand. Through our work we found out that flow experience and attitude towards mobile advertising were supported for purchase intention. While permission, personalisation, infotainment and incentives were supported for attitudes towards mobile advertising.

Keywords: *digital marketing, mobile marketing, mobile advertising, smartphone, broad band, m-commerce*

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Umeå, 27th of May 2014

Madawa Abeywickrama & Jana Vasickova

Table of Contents

1.	Introduction	1
1.1	Choice of subject	1
1.2	Problem Background	1
1.3	Research gap	5
1.4	Research question	9
1.5	Purpose	9
1.6	Scope	10
2	Scientific methodology	11
2.1	Research Philosophy	11
2.2	Research approach	11
2.3	Research design	12
2.4	Data collection method	12
2.5	Research strategy	13
2.6	Survey methods	13
2.7	Time Horizon	14
2.8	Choice of theories	15
2.9	Criticism of sources	16
3	Theoretical framework	17
3.1	Mobile advertising	17
3.2	Consumer attitudes towards mobile advertising	20
3.3	Flow theory and experience	25
3.4	Attitudes towards mobile advertising and purchase intention	26
3.5	The Models used	27
3.6	Conceptual model	28
4	Practical Methodology	30
4.1	Operationalization and measurement of variables	30
4.2	Designing the questionnaire	30
4.3	Sample strategy	32
4.4	Sample size	34
4.5	Data analysis	34
4.6	Regression analysis	35
4.7	Ethical Considerations	35
5	Empirical findings & Data analysis	37

5.1	Demographics	37
5.2	Additional findings	38
5.3	Cronbach's Alpha and Descriptive Statistics	40
5.4	Regression analysis.....	42
5.4.1	Regression 1	42
5.5	Regression 2- Attitudes and Flow experience effect on purchase intention.	44
6	Discussion.....	46
6.2	Regression 2 - Attitudes and Flow experience effect on purchase intention.....	47
6.3	Revised conceptual model	48
7	Conclusion and Recommendations.....	49
7.1	General Conclusions.....	49
7.2	Theoretical Contribution	49
7.3	Practical Implications	50
7.4	Truth Criteria	51
7.5	Limitations.....	52
7.6	Suggestions for future research	52
8	Reference List.....	54
9	Appendix	1

List of Figures

Figure 1. Loyalty Leather	Error! Bookmark not defined.
Figure 2. Marketing Ecosystem.....	Error! Bookmark not defined.
Figure 3. Swedish Mobile market in comparison to other Nordic countries	4
Figure 4. Relation between mobile advertising and purchase behaviour.....	9
Figure 5. Mobile vs. Fixed Broadband Subscription. Source	18
Figure 6. Conceptual Model	29
Figure 7. Revised Conceptual Model	48

List of Tables

Table 1 Gender spread in our sample.....	37
Table 2. Age spread in our sample.....	37
Table 3. Internet on-the-go usage	38
Table 4. Relationship between Income and Internet on-the-go usage.....	38
Table 5. Most common mobile advertising form.....	39
Table 6. Spread of mobile advertising channels in our sample.....	39
Table 7. Consumers' preferred forms of mobile advertising	39
Table 8. Frequency of exposure to mobile advertising.....	40
Table 9. Spread of Generation C and internet on-the-go characteristic in our sample	40
Table 10. Descriptive Statistics and Cronbach's Alpha.....	41
Table 11. Correlation	42
Table 12. Summary Attitudes towards mobile advertising and predicted items	43
Table 13. Regression 1: ANNOVA	43
Table 14. Regression 1: Coefficients	44
Table 15. Summary Flow experience and Purchase Intention	44
Table 16. Regression 2. ANNOVA.....	45
Table 17. Regression 2: Coefficients	45

1. Introduction

This chapter introduces and describes the background information about mobile marketing from the perspective of technological development, its monetary value and politic actions related to it. To serve the purpose of the thesis, it later introduces the concept of mobile advertising and appoints the research gap. We also state how this thesis is going to contribute to the existing knowledge and finally we state the research question and the purpose.

1.1 Choice of subject

The authors of this thesis, Jana Vasickova and MadawaAbeywickrama, are currently students of the third year of the International Business Program at Umeå School of Business and Economics at Umeå University. We both find an interest in the development of contemporary technologies, mobile internet and marketing strategies. At the beginning, we wished to select topic in relation to big data. Later we considered database marketing, yet it was mobile marketing that attracted us the most. We selected mobile marketing because we can relate to it, experience it on a daily basis, thus it is interesting for us to understand the base it is built on. Especially now, when the blend of IT technologies and marketing, in a response to the rapid development in the IT industry, is significantly strengthened. However, having different academic and practical background working together helped us to understand a new concept of marketing as well as academic and industry issues covered by the research. We have learnt a lot from each other and are enthusiastic to learn even more about those fields in the future. Conducting research and consequently providing managerial contribution can potentially enhance the usage of mobile marketing in Umeå. We contribute to the existing research by testing theories of advertising value, flow experience and consumer purchase intention. Such an opportunity was a great challenge for us to address.

1.2 Problem Background

1.2.1 Digital marketing

As Kurtz & Boone (2012, p. 20) describe, advertisers and marketers used, a transaction-based marketing. Transaction-based marketing is a process of an interaction between seller and customer, where seller focus primarily on attracting customers and closing deals, without any follow up. Such an interaction was unique and happened once at the time (Kurtz & Boone, 2012, p. 21). Yet the 21st century can be characterized by a shift from traditional transaction-based marketing. Customers are put in focus of marketers that, through longer-term strategy tries to build a relationship with an individual customer at a time, practicing so called a relationship-based marketing (Kurtz & Boone, 2012, p.20). In relationship-based marketing sellers try to develop, grow and maintain long-term and exchange relationship with their customers. Turning employees, suppliers and partners into new customers (Kurtz & Boone, 2012, p. 20). Clarke (2012) who studied strategic PR and integrated marketing communication addresses technological development as the primary agent of change in media. Due to dramatically developing technology, Fahy & Jobber (2012, p. 264) furthermore draws a clear relations between rapidly growing global Internet penetrations, the amount of time being spent online and increased marketing activities taking place via digital

media. Performing marketing activities through digital technologies is commonly known as a digital marketing (Fahy & Jobber, 2012, p. 265). Development of modern technologies, digitalisation of business, and amount of time individuals spent online, the activities they engage in, enhanced the replacement of transaction-based marketing with relationship marketing. Technological development and increasing internet penetration also intensified replacement of the traditional marketing channels by new media communication channels that stand for conversation, interaction, participation and co-creation of meaning (Clark, 2012, p. 434; Fahy & Jobber, 2012, p. 265). Digital marketing can have various forms; it can be executed in a way of viral marketing, mobile marketing, interactive television marketing, internet marketing, and social media marketing. Similarly, rich media messages are increasingly famous mobile advertising channel among smart phone consumers due to the in-application interactivity via sound, video and gaming (Fahy & Jobber, 2012, p. 265). We perceive digital marketing as a more suitable approach to target customers, who engage in online interaction, especially the youth. Rohm et al., (2009) states that mobile advertising is the best strategy to target youth customers, because of their high level of interaction with mobile devices.

1.2.2 Mobile marketing

As we could see in the Mullen (2014) marketing ecosystem graphics, online and mobile communication channels play a key role in relationship management and turning customers into advocates. Due to the rapid technological development over the scope of the past ten years, mobile phone endured dramatic changes in terms of used technologies, design and additional features. Those changes introduced a new type of a mobile phone, the Smartphone and consequently introduced a new channel for marketers to reach their customers, the mobile internet. To realize marketing communication via mobile phone and to transmit marketing messages via wireless technology is defined as mobile marketing by Kurtz & Boone (2012, p. 21). The real enhancement of mobile marketing came with the introduction of SMS services and accessibility to the Internet. According to Jayawardhena et al., (2009), mobile phone is currently the most ubiquitous personal item in the world. Just in Europe Union its penetration reached 130 % in 2012 (European Commission, 2013, p. 63). According to Fahy & Jobber (2012, p. 269), mobile marketing has several advantages: 1) cost efficiency; the price of SMS varies between 15p and 25p. 2) personalisation; marketers can target very particular group of customers, 3) interactivity; receivers can directly respond to the marketing message and thus marketers can engage in two-way communication or start building relationship, 4) time-flexibility; marketers can send messages at any time. Therefore, marketers adapt appropriate mobile marketing strategies to reach customers via new device. Adoption is growing and as a result mobile marketing has become “staple tactic in brands” (Rohm, et al., 2012). The first form of mobile advertising customers could have experience was a Short Message Service, henceforth only as SMS, in 1997 (Ünal et al., 2009). The Increasing popularity of SMS has laid a foundation of a new advertising channel called mobile advertising (Tsang et al., 2004).

1.2.3 Global Development in Mobile Marketing

The growing importance and value of mobile marketing can be seen in industrial monetary predictions and financial audits as well. Studies from 2006 showed that 90% of large global marketers planned to include mobile marketing practices in their marketing strategies by 2008, and more than half of those marketers planned to spend over 25% of their total marketing budget towards those activities and initiatives (Sultan

et al., 2009). According to the U.S. IAB, IAB Europe and IHS the global mobile advertising revenue reached \$8.7 billion in 2012 compared to \$5.3 billion in 2011 (IAB, 2012). In 2013, digital marketing budgets increased by 20%, compared to the prior year and such an increase in spending accounts for investments in establishing collaborations, new technologies and new roles to execute a better customer experience. However, predictions of the growth level vary, based on these numbers Kim & Han (2014) found mobile marketing as a promising advertising market. Gartner (2014), research and advisory firm, forecast global mobile advertising spending to grow and reach \$18 billion by 2014 and grow further more until \$41 billion by 2017. Growing trend, compared to previous years, is significant and thus Gartner (2014) is even more precise in predictions and claims, that due to the fact that mobile applications and websites develop faster, than the advertisers requests on ads space on mobile device screens, the growth in mobile advertising spending will slow down over the upcoming years. Now when we covered the essential issues of mobile marketing in general, we will focus on perceived utilization of the internet, by EU. We strengthen the importance of the internet, in conjunction with mobile marketing due to the fact that mobile advertising is mainly performed via mobile Internet.

1.2.4 Europe Union Response to Fast Growth of IT Industry and its relation to Mobile Marketing

EU has been experiencing recession since 2007 that has marked it with a lasting contraction in GDP and tremendously high unemployment rate, noteworthy among the youth. Accounting for 23.5% in general and thus representing a new historical maximum in February 2013. In other words 23.5% represents 5.7 million young people across EU (European Commission, 2013b). EU addresses unemployed youth between 18 - 24 years age as a potential '*lost generation*'. At the same time taking in consideration the fast growth of IT industry that will be lacking 900 000 workers and/or employees by 2015. Therefore, in order to avoid tremendous social and economic costs, EU identifies technological progress, including digitization and its adoption by society as a new prospective source of growth and employment (European Commission, 2013b). This proposition is supported by increasing the general trend in online usage, shopping, and usage of eGovernment services (European Commission, 2013b). In 2010 EU Commission adopted the Digital Agenda for Europe plan, a document identifying 101 specific policies addressing actions needed to be implemented in order to meet goals in the Digital Single Market, trust and security, fast and ultra-fast internet access and others. Digital Agenda for Europe introduced key targets from which we would like to highlight following: target 1a. The entire EU to be covered by broadband by 2103, target 2a. 50% of the population to buy online by 2015 and target 2b. 20% of the population to buy online cross-border by 2015. Based on preview literature and those propositions we assume that m-commerce and thus mobile marketing is going to undergo an exponential growth. GSMA (2011) recognizes those targets and agrees that single digit market based on a fast internet connection, and interoperable applications will enhance the economic growth, innovation, and improve performance of citizens and business on a daily basis. Following paragraph will focus on current trends in Scandinavian countries.

1.2.5 Trends in Scandinavian Countries

According to European Commission nations of Sweden, Finland and Denmark prefer mobile to fixed broadband. Development over the few past years can be seen in figure 4. Due to the wide spread of mobile broadband, mobile marketing is expected to rise as

a regular part of the marketing mix (European Commission 2013a, p. 74). However, accessing internet via computer remains the main flow, global mobile marketing revenues are forecasted to grow despite the recession. Given the growth of mobile marketing and its predicted exponential growth, we assume mobile marketing will play a significant role as a growing proportion of advertising revenues. It will be also more commonly discussed topic from a legal perspective, discussing privacy issues, protecting customers' rights and controlling costs and price levels.

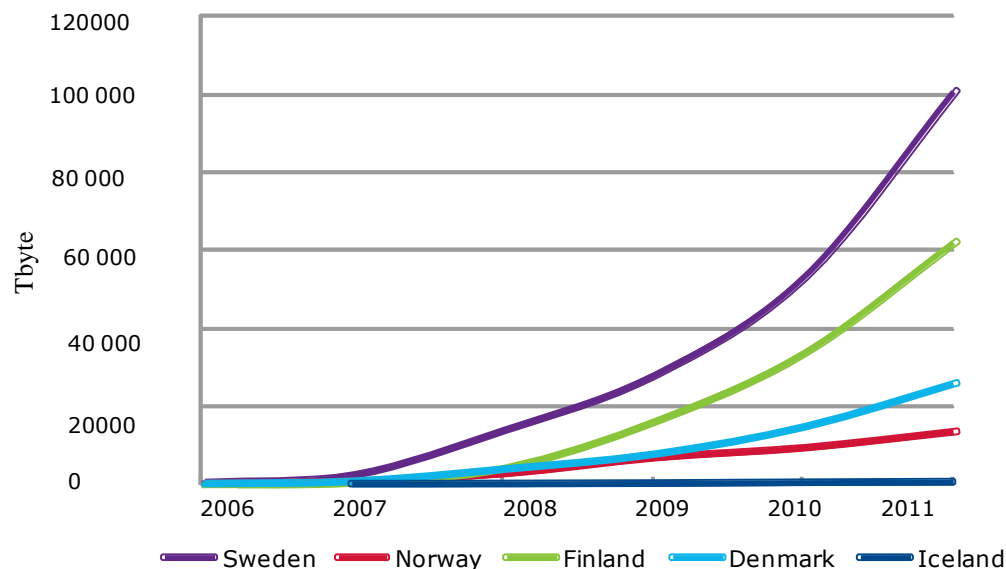


Figure 1. Swedish Mobile market in comparison to other Nordic countries. Source: The Swedish Post and Telecom Authority, 2012

1.2.6 Recent trends and development in Sweden

As it has been indicated in the previous paragraph, Scandinavian countries can be perceived as early adopters of high technologies. It has been Nokia from Finland that has introduced the first smart-phone targeted exclusively on young people (businessinsider, 2011). Later in 1997 the first SMS advertisement was sent in Scandinavia (Ünal et al., 2011). In Sweden there is 60 - 70% Smartphone penetration (IAB, 2013b; European Commission, 2013a) and thus Sweden represent the seventh highest penetration of smart-phone in the world (Fox, 2013; Google, 2013), with 90% penetration among youth of age 15 - 18, 89% penetration of female in age of 25 - 34 and 89% penetration of smart-phone among men of age 35 - 44 (Think with Google, 2013). As the Swedish Post and Telecom Authority, henceforth only as PTS, announced in their annual report in 2011 there were 5.2 million mobile broadband subscriptions in 2011, almost two million broadband subscriptions represented smart-phones (Kojo et.al,2012, p.17). Swedish Government's Broadband Strategy objectives are in alignment with EU incentives, to provide 90 % of households with world-class broadband by 2020 (Kojo et.al, 2012, p.17). However, accessing the Internet via smart-phone increases and even though the majority of Swedes opens to a mobile marketing, execution of mobile marketing is low and companies struggle to identify the right approach to their customers. Fifty percent of Swedish marketing agencies view their branches as incompetent and thus do not suggest any mobile marketing to their clients (IAB, 2013a).

At the beginning of the internet era, many firms did not understand their customers' needs nor their expectation from the online environment. Unfortunately, many of them persist to struggle with how to effectively communicate and sell products online (Constantinides, 2004). The Vast majority of mobile advertising happen via mobile Web (mobithinking, 2012) Taking the latter into consideration, we can see a similar pattern in mobile marketing. For example EU27 has experienced a substantial increase in Smartphone penetration over the past few years. Popularity of accessing the Internet via a Smartphone grew by 20% between the years 2008 and 2012 (European Commission, 2013a). Yet the adoption of e-commerce and m-commerce among SME is still a niche activity (European Commission, 2013a). Such trend applies overall around EU27, even in the most rapidly adopting countries like Sweden and Denmark, where only a quarter of SMEs use internet as a distribution channel. Based on this adaptation trend we assume even a smaller proportion of SMEs use mobile as an advertising and communication channel to their customers (European Commission, 2013a). Therefore, writing a thesis about mobile marketing, that is experiencing growth, can be considered of a good timing, reflecting upon very current events and changes in society and the economy. In the next section we will describe trends and development in Sweden. The aim of this thesis is to examine how the flow experience influences the attitude towards mobile advertising and how it affects the consumer purchase intention.

1.3 Research gap

"Consumers are way ahead of where advertisers and publishers are." (Hof, 2014)

To the best of our knowledge, no studies have been conducted regarding the flow experience and its effects towards consumer attitudes in the past decade. Since the topic of our research spreads across various fields such as human-computer interaction, marketing and psychological theories we have tried to identify research gaps in each one of them and show their interconnectivity. Further, we are going to state the purpose of our research.

1.3.1 Research on mobile marketing in general

As Lamarre et al., (2012) concludes in their study, the most research on mobile marketing and mobile advertising has been conducted between the years 2008 and 2010. However, we can observe growing academic and industrial interest in mobile marketing, its research is still in the initial stage (Watson et al., 2013; Lamarre et al., 2012). Research focusing primarily on consumer behaviour shows a positive correlation between atmospheric cues, level of navigational skills, personalisation and purchase behaviour (Lu & Su, 2009; Lamarre et al., 2012; Pescher et al., 2013). Studies related to the cultural background and its influence on consumer attitudes and purchase intention proves that culture still plays a role, yet might be a diminishing factor (Sultan et al., 2009; Liu et al., 2011; Mazaheri et al., 2013). Liu et al., (2011) proves that informativeness, entertainment and credibility have a positive effect on mobile advertising acceptance (Tsang et al., 2004; Sultan et al., 2009; Ünal et al., 2011; Rohm et al., 2012; Watson et al., 2013). In terms of used forms previous research has focused mainly on SMS and proved that permission and personalisation plays a key role in consumer acceptance (Ünal et al., 2011; Watson et al., 2013). Few studies have been conducted in relation to Quick Response Code, henceforth only as QR code (oxford dictionaries, 2014). QR codes have a tremendous potential and can possibly help to remove negative attitude towards mobile marketing (Watson et al., 2013). Viral

marketing strategies succeed once providing entertaining and useful message (Pecher et al., 2013). Yet the spectrum of technological possibilities is much wider. Contemporary academic research neglect newer technologies such as Bluetooth, Near Field Communications, henceforth only as NFC, and location-based services using GPS (Lamarre et al., 2012). Another rarely discussed topic is atmospheric cues in relation to mobile marketing and customer purchase intention, m-commerce. Because of the increasing revenue and EU incentives to enhance R&D in IT technologies, we anticipate much more academic research and industry reports to occur in the coming years.

1.3.2 Cultural attributes and its impact on attitudes towards mobile advertising

Investigation of cross cultural attributes influencing acceptance and attitudes towards mobile advertising is in its infancy as well, accounting mainly for comparison , significantly different cultures, e.g. Japan and Austria (Liu et al., 2012) or USA and Pakistan (Sultan et al., 2009). In general, studies and market research carried out in mobile marketing usually focus on high income countries, for example USA, European big five economies (France, Germany, Italy, Spain, UK), BRIC countries (Nielsen, 2010) extended of Japan, South Korea (IHS, 2014). Extensive research has been conducted in PR China and Taiwan China. Regardless, later findings the highest smart-phone penetration can be observed in the following ten countries, aligned in descending order: United Arab Emirates, South Korea, Saudi Arabia, Singapore, Norway, Australia, Sweden, Hong Kong, UK and Denmark, leaving the USA at the 13th rank (Fox, 2013; Think with Google, 2013). We assume it is because Asia Pacific and North America account for almost two-thirds of global mobile traffic (European Commission 2013b). Our assumption is further supported by IHS report, stating mobile advertising spending and consumer spending on digital apps, games and movies is high and remain its increasing trend in those regions (IHS, 2014). Cultural background and its influence on customers' attitudes and perception towards an online environment have been investigated by Mazaheri et al., (2013). Everdingen & Waarts (2003) examined the effect of national culture on adoption of innovation among European countries based on Hofstede (2001) and Hall (1976) national culture classification. In their study, they described Sweden as a low context, individualistic, monochronic and famine culture that, because of those characteristics has a high level of innovation adoption and penetration (Everdingen&Waarts, 2003).We assume the attributes of the national culture determine high smart phone and broadband penetration in Sweden. Yet, as Sultan et al., (2009), suggest further research should be conducted in order to explore cultural differences and their influence on the mobile market acceptance (Sultan et al., 2009).

1.3.3 Advertising message content

As it has been mentioned earlier, credibility, informativeness and entertainment play a role in mobile marketing attitudes and perception. Those attributes are founding units of advertising message content. Informativeness and entertainment are often appointed to as infotainment. Those all in conjunction with personalisation and permission have been examined in relation to attitudes towards Web advertising and mobile advertising (Tsang et al., 2004; Ünal et al., 2011; Liu et al., 2012). Tsang et al., (2004) outcomes prove that it is informativeness and entertainment that form customers' attitudes towards advertising the most (Tsang et al., 2004). Yet Liu et al., (2012) suggest it is the credibility and infotainment that forms customer attitude. Rohm et al., (2012) proposed another individual characteristic such as innovativeness, personal attachment, and risk avoidance and stated their impact on forming the individual's perception of marketing

messages usefulness and attitude toward mobile advertising. Recently, two models have been built by Kim & Han (2014) and by Ünal et al., (2012) who combine Ducoffe's Advertising value framework (1995), Theory of Reasoned Action by Fishbein and Ajzen (1975) with Csikszentmihalyi theory of flow (1975) in relation to mobile advertising and examined its interconnectivity. These theories will be described more specifically in following section. Ünal demonstrate in his study that advertising sends with permission and fulfilling advertising value attributes are positively perceived. Kim & Han (2014) agree that in a case, when customers perceive mobile advertising useful, relevant and valuable, they are more likely to purchase products or services. As it has been mentioned earlier, consumers generally have negative attitudes towards mobile advertising (Tsang et al., 2004). Thus, knowing which attributes of online advertising message could help to build a positive attitude and consequently help to enhance purchase intention and revisit of the website or App would be appreciated by marketers. Ünal et al., (2011) suggest further research in terms of personality, and lifestyles in order to develop more suitable messages for niche groups and thus limit irritation. Based on reviewing industry reports we believe those topics deserve more attention, especially now when good user interface is considered as one of the significant competitive advantages (Hausman &Seipke, 2007).

1.3.4 Atmospheric environment

Researchers addressed atmospheric qualities or cues and web interface as factors determining the effectiveness of the medium, and level of customer interaction with companies (Eroglu et al., 2001; Hausman &Siepke, 2008; Mazaheri et al., 2013). As Mazaheri et al., (2013) mention cultural background influences consumer perception of specific web design features. When Donovan and Rossiter (1982) developed Stimulus-Organism-Response (S-O-R) framework, they suggested that environmental customer experience with a store effects customer emotions and later leads to developing a positive approach or avoidance towards the store (Eroglu et al., 2001). Erogluet al., (2001) later extended S-O-R framework of high and low task relevant cues. High tasks represent the verbal content related to shopping such as price, delivery, and return policies. While low tasks represent the colour, background patterns, fonts, music and sound, borders and pictures. Telepresence describe the customer awareness of their presence in the virtual environment. Telepresence and environment are related to atmospheric cues. Both influence customers' decision to purchase (Constantidenes, 2004). Effectiveness and consumer interface is usually neglected by researchers (Eroglu et al., 1999). Yet there is very little research conducted to describe atmospheric cues, telepresence and environmental online experiences for ecommerce and the more for m-commerce and mobile advertising.

1.3.5 Flow experience

In compliance with globally intensive internet penetration and increasing use of internet, Google's analytics (Our Mobile Planet, 2013) show that both female and male spent a significant proportion of their usage time playing games, watching movies, and engaging in social networking. All those activities have common patterns. Web users experience enjoyment with total involvement, high peak and high performance, their skills are being challenged, loss of self-consciousness and self-reinforcing. Those attributes describe a flow experience. The theory of flow was originated by Csikszentmihalyi in 1977, when he studied the involvement of artists in painting. He described it as: "holistic sensation that people feel when they act with total involvement" (Novak & Hoffman, 1997). Over the scope of the past twenty years

researches Koufaris, (2002); Korzaar, (2003); Hoffman & Novak,(1996) enriched Csikszentmihalyi flow concept and found that people can experience a flow when engaging with technological devices for example browsing the Internet, playing online games, watching mobile TV and others. Such experience is known as flow during consumer navigation of the Web either fixed or mobile (Novak et al., 2000; Huang, 2006). Huang (2006) includes S-O-R theory in his research; demonstrate all four components of flow: time distortion, enjoyment, telepresence and concentration and finds that users experiencing deeper flow experience are much more likely to purchase intention (Huang, 2011). However, he admits that the findings are inconsistent (Huang, 2011). Regardless the fact of increasing adoption of mobile advertising, the only article that introduces a relation between flow experience and mobile advertising is written by Kim & Han (2014), who state that sophisticated mobile advertising displayed at 4G smart phones, can create a flow experience for the consumer while browsing the mobile Web, or application advertisements on a smart phone. One possible explanation for the lack of contemporary research regarding the flow experience in online environment might be lack of precise definition as suggested by Novak et al., (2000). The latter has been addressed by the author of theory Csikszentmihalyi himself (1975). As Novak et al., (2000) suggested level of skills and challenge should be in balance to enhance customer usage of the Web. Regardless different approach, frameworks and components of flow researches have been studying they all agree that the flow is captivating, and thus people develop positive attitudes when experiencing flow, that can even lead to an addiction.

1.3.6 Consumer purchase intention and flow experience

Undoubtedly biggest opportunity of mobile marketing and advertising for marketers is to be transformed Smartphone subscribers into mobile shopping customers. Managers are advised to introduce mobile commerce to customers who have already experienced e-commerce and thus are familiar with the environment (Lu & Yu-Jen Su; 2011). Literature preview suggest us that consumer purchase intention via Smartphone is affected by their attitudes towards mobile marketing (Hausman & Siepke, 2009; Kim & Han, 2014). Several other factors such as belief in their own skilfulness, ease of use, ease of access, usefulness, enjoyment has an impact on consumer purchase intention (Li et al., 2011). Huang has focused on investigating customer purchase intention from a psychological perspective of stimulus organism response, investigating whether customers are more motivated to purchase by information processing or experiential stimuli (Huang, 2011).

As Anders Boerde (IAB Stockholm, 2013b) explain customers are ready and willing to engage with brands and companies in their "mobile life". Yet the marketers are a bit more reluctant, they are not sure about customer response, willingness to engage in mobile communication due to lack in confidence how to handle multi-channel communication and mobile marketing (IAB, 2013b). The current situation can be described as a chain of actions. Marketing agencies are lacking understanding and knowledge about digital forms, or advertising; therefore marketers are reluctant to buy digital ads space due to the lack of unity and synergy among the agencies (finpro, 2014). Thus, in our research we wish to address those concerns and testify demographics, usage of smart phone among customers in Umeå, Sweden. Further, we are going to testify customers' perception of Web design. We believe our research can lighten up some of the marketers and advertisers doubts regarding how to design their multi-channel marketing communication, design mobile website and mobile

application. In this study we are going to investigate the impact of flow on consumer attitudes towards mobile advertising and how does flow affect consumer purchase intentions.

Based on previewed literature, we have identified a research gap in a form of a lack of understanding among Swedish marketers regarding how to engage customers through mobile advertising and enhance their online purchase intention. Lacking knowledge and research are in direct relation to a limited performance and not promising results of the mobile advertising channel. For instance, after noticing the advertisement intention to find more information or purchase the product has decreased slightly (see figure 5). Therefore, finding the right balance between components of flow, advertising value, permission and personalisation and their applicability on web design and mobile marketing would be of great use for marketers and advertisers.

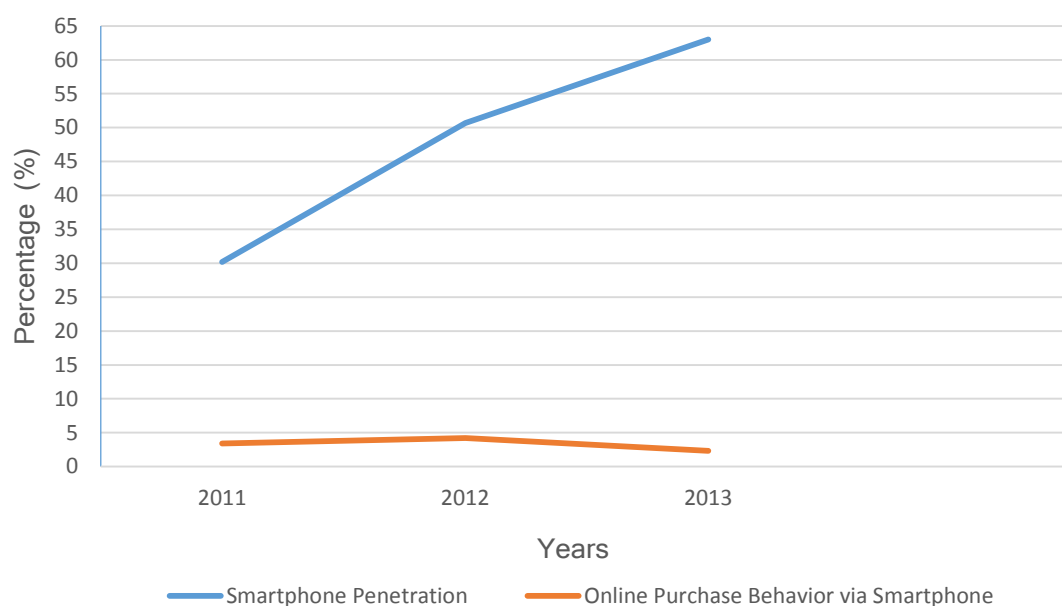


Figure 2. Relation between mobile advertising and purchase behaviour. Source: Google, Our Mobile Planet, 2013

1.4 Research question

What is the impact of advertising message personalisation, permission, and flow experience on attitude towards mobile advertising? What is the effect of attitude towards mobile advertising and flow experience on purchase intention of Swedish customers?

1.5 Purpose

The purpose of this thesis is to investigate the impact of message content and flow experience on attitude towards mobile advertising, as well as to investigate what effects do attitudes toward mobile advertising have on customers purchase intention. Customers' attitudes towards mobile advertising and its interrelation with consumer purchase intentions. Most importantly, we specifically develop a comprehensive model combining elements from several models, diversifying over advertising value, atmospheric cues, S-O-R theory, and theory of flow. Our conceptual model will help us

to measure the effects of our predicted factors, such as credibility, infotainment, and irritation as a component of message content, personalisation, and permission on attitudes towards mobile advertising. Later we will test flow experience and whether it affects attitudes towards mobile advertising and whether flow experience can enhance consumer purchase intention.

Our research contributes to the literature of mobile marketing by developing a conceptual framework, examining the impact of flow experience, attitudes on mobile advertising and purchase intention among consumers in Sweden. Its practical contribution is going to be executed through framework highlighting what website and mobile application attributes, help enhance purchase intention.

1.6 Scope

In this thesis, we are going to focus on how advertising message content (its credibility, informativeness, entertainment, and irritation) affects the attitudes towards mobile advertising. Based on data from Google, Our Mobile Planet (2013) that in figure 2 describe the increase in smart phone penetration yet diminishing purchasing intention via smart phone, this pattern is significant since 2011. Taking in consideration the rapid application of mobile advertising, we decided to investigate the potential causes. This intention led us to consider advertising value model developed by Ducoffe (1995) later on enriched of personalisation and permission factors, by Georgiadis&Manitsaris (2005); Jayawardhena et al., (2009); Ünal et al., (2011). Due to the tremendous technological development and increasing mobile marketing spending, we included flow experience as a significant variable affecting attitudes towards mobile advertising, such a decision is based on Kim & Han (2014). The effect of attitudes towards mobile advertising and the effect of flow experience to customers' purchase intention would help us to identify the significant attributes effecting purchase intention of customers.

However Sweden has one of the highest smart phone penetration among EU27 (European Commission, 2013a), the purchase behaviour and purchase intention are low. Therefore, we developed theoretical framework on academic articles focusing on attitudes towards mobile advertising, industrial reports describing trends in mobile marketing adoption, and spending. We considered the effect of culture on attitudes. After taking in consideration limited research about mobile marketing trends in Sweden we selected current research paper and reports.

Based on previewed literature, we have developed an understanding of factors influencing flow experience, customers' attitudes towards mobile advertising and purchase intention. We stated why marketers should take in consideration attributes of flow, attitudes and their impact on purchase intentions.

2 Scientific methodology

In this section of our thesis, we discuss about the selection of suitable research philosophy, methodology, methods and tools that enabled us to further investigate pronounced hypotheses. At the end, we stipulate the criticism of these sources.

2.1 Research Philosophy

To reflect upon our selection of research philosophies, epistemology and ontology, we will start with presentation of epistemological orientation. Epistemology is a philosophical position that concentrates on what makes up acceptable knowledge in a branch of teach (Saunders et al., 2012, p.132). There are three main aspects of epistemology; positivism, realism and interpretivism (Saunders et al., 2012, pp.132-137). Positivism perceives “*only the observable phenomena can provide credible data*” and use highly structured methodology to reduce phenomena to smaller elements, test theories, and deliver credible for the analysis (Saunders et al. 2012, pp.136-137). Interpretivism focuses on the details of a social phenomenon (Saunders et al., 2012, p.140). Therefore, the role of interpretivist is to explorer actions of the social actors qualitatively in order to understand and interpret reality of a phenomenon. Saunders states that realism has the ability to objectively explain consumer attitudes and provide credible data for testifying the phenomena (Saunders et al., 2012, p.136). Saunders also argues that the hidden reality of a social phenomenon can be understood by a practical and theoretical process of social sciences (Saunders et al., 2012, p.136). However, after considering all three aspects of epistemology, we chose positivism as a more suitable philosophy for the purpose of our study, because it will enable us to reflect upon our collected data about observable reality and deduct law-like generalization (Saunders et al., 2012, pp.132-134).

The ontological field of philosophy examines the nature of reality or being (Saunders et al., 2012, p.130). According to Saunders, there are mainly two aspects of the ontology namely: objectivism and subjectivism (Saunders et al., 2012, pp.130-132). “*Objectivism represents the position that social entities exist in reality and external to and independent of social actors*” (Saunders et al., 2012, p.132). On the other hand, subjectivism interprets that “*social phenomena are created from the perceptions and actions of the social actors*” (Saunders et al., 2012, p.132). Therefore, for the subjectivists, it is important to understand deeply the subjective reality of the customers in order to understand their intentions, motives and actions towards particular social phenomena. But according to our chosen research subject and the question, we were going to testify already existing theories and make meaningful contributions to those theories rather than invent new theories. Thus, we are going to explain the effect of mobile advertising on consumer purchase intention rather than explore the subjective reality of consumers in deep. Therefore, we realize that ontological aspect in this thesis is highly related with objectivism, since we are objectively observing different influential factors of mobile marketing and their impact on the consumer attitudes and their purchase intention.

2.2 Research approach

According to Saunders there are three types of research approaches: induction, abduction and deduction (Saunders et al., 2012, p. 144). Inductive approach starts by doing observations and collecting empirical data in order to explore a phenomenon deeply. Subsequently, the researcher can draw generalized conclusions from the

collected empirical data and look for different patterns from this data (Saunders et al., 2012, p.146). Thus, theory building and generation are the main aim of inductive approach (Saunders et al., 2012, pp.144-146). The Abductive approach uses a combination of both induction and deduction approaches in order to explore a phenomenon, later build new theories or modify existing theories (Saunders et al., 2012, pp.147-148). The deductive research approach based on making hypotheses on existing theories; express relevant variables and deducing how to examine the variables by hypothesis testing (Saunders et al., 2012, pp.144-145). Therefore the deductive approach is the most suitable one for our study and it allows us to draw conclusions from the results and examine whether or not there are evidences to support the hypotheses or possible modification of the theory (Saunders et al., 2012, pp. 145-146). The deductive approach is best fitted with our selected philosophy as well as the nature of our research for the main purpose of our thesis is to testify previous theories rather than inventing new ones.

2.3 Research design

“The research design is an overall plan of how the researcher answers the research question” (Saunders et al., 2012, p. 159). “A research design offers a basis for the gathering and scrutiny of data”(Bryman & Bell, 2011 p. 40). According to Saunders et al.(2012, p. 160) there are three types of research designs: exploratory, descriptive and explanatory. Selection of one design is determined by the type of research and its purposes. The most common of them is descriptive research that combines descriptive with subject investigation (Nardi, 2003). As the name implies, descriptive designs are useful when describing certain situations such as persons or events (Saunders et al., 2012, p. 171). According to Nardi, exploratory research is applied when researchers wish to develop an understanding of a subject that has not received yet enough attention (Nardi, 2003). Saunders’s explanation of exploratory design is aligned with Nardi. In exploratory research design, the researcher aims to gain a deeper understanding of a subject by examining open questions (Saunders et al., 2012, p. 171). Taking in consideration the dispersed level of research performed regarding mobile advertising, online purchase intention in relation to flow experience, the nature of our research is related to explanatory. In our thesis, we emphasize the practice of determining causal relationships between constructs (Saunders et al., 2012, p. 172).

Quantitative and qualitative are the main form of research design methods (Saunders et al., 2012, p.161). The quantitative method implies the collection of numerical data and analyse the relationships between the variables by using standardized statistical techniques (Saunders et al., 2012, pp.162-163). On the other hand, in qualitative research uses non standardized methods to collect data and non-probability sampling techniques to analysis the collected data deeply (Saunders et al., 2012, p.162). The main aim of the collect data from our research question we decided that a quantitative method is the most appropriate research method for observing the consumer attitudes and flow experience effects on mobile marketing.

2.4 Data collection method

Research can select one of two kinds of data sources, in order to assemble the most appropriate data for his/her research. According to Saunders et al. (2012, p.304), the two kinds are as follows: primary and secondary data. Primary data are collected using different data acquisition techniques, than secondary data. The biggest convenience of

primary data is that they are unique, tailored-made for specific research and environment at the time. “Secondary data are data collected for any purpose other than the problem at hand (Malhotra & Birks, 2007)”. Secondary data can be easily obtained from the internet, textbooks and research articles (Saunders et al., 2012, pp. 314-316). Furthermore, secondary data are relatively inexpensive and quickly obtained in comparison to the primary data (Saunders *et al.*, 2012, pp. 318-320). But in comparison to primary data, trustworthiness is low in secondary data due to the absence of the researcher in the questionnaire design and data collection process (Bryman & Bell, 2011, p. 321). Furthermore, secondary data is specific to a particular research and those data may not exactly match with the requirements of another research (Saunders et al., 2012, p. 319). Considering those options, we have decided to use primary data in this study. Primary data will also help us to obtain new information, based on uniqueness of Swedish environment. Collection of primary data, examines the proposed conceptual model and thus we provide theoretical contributions at the end of our thesis work.

2.5 Research strategy

“A research strategy is a plan of action how a researcher will go about answering his research question” (Saunders et al., 2012, p.173). There are eight main strategies, experiment, case study, survey, narrative inquiry, archival research, action research, and grounded theory (Saunders et al., 2012, p. 173). Specific characteristics apply to each and individual strategy. The applicability of a suitable strategy is dependent on selected research philosophies and methods of collection and analysis of data (Saunders et al., 2012, p.173). A research strategy also depends on which time the study focus on and the necessity of control over the event (Yin, 2007). Qualitative researchers mainly apply philosophy of interpretivism and action research, case study and ethnography are some of the commonly used strategies in such researches (Saunders et al., 2012, p.163). Our quantitative research is based on philosophy of positivism, thus the experimental and survey strategies are more suitable for such a research design (Saunders et al., 2012, p.163). Experiment focuses on examining a change caused by an independent variable on the dependent variable (Saunders et al., 2012, p.174). The researcher must state a null hypothesis, that is based on prediction that there is going to be an effect on an alternative hypothesis. Experiment employs sample of participants in two groups: experimental and control group (Saunders et al., 2012, p.175). Bryman & Bell (2012, p.50) articulate that experiment are more common in social psychology and organization studies. Researchers have a greater control over the sample and environment (Saunders et al., 2012, p.176). While survey as a research strategy is commonly applied to deductive research approach and to answer ‘what’ ‘where’, ‘when’, ‘who’, ‘how many’ and ‘how much’ questions while an experiment is used to test predictive hypotheses (Saunders et al., 2012, p.176). According to Bryman & Bell (2012, p.50), collecting quantitative or qualitative data of several variables can testify later for relationships between variables (Bryman & Bell, 2012, p.716). Saunders further state survey is used for exploratory and descriptive research to address. Our study asks the question of what and further test variables, thus the next paragraph explains the attributes of survey as a research method, and build reasoning why have we applied it to our study.

2.6 Survey methods

However, Saunders et al., (2012) suggest interview for investigating customer attitudes, we have selected self-administered questionnaire based on Bryman & Bell’s list of

advantages (Bryman & Bell, 2012, p. 233). Bryman & Bell (2012, p. 60) describes survey as a “combination of a cross-sectional design and data collection technique either questionnaire or structured interview on more than one case and at a single point of time”. In order to administer structured interview correctly, researchers should be trained in wording (Bryman & Bell, 2012, p.217). According to Saunders et al., (2012, p. 420), structured interview requires, interviewers to carefully select sample, arrange a schedule of interviews and deal personally with respondents. It can be executed via personal meeting or via telephone conversation (Saunders et al., 2012, p.420). Another alternative of executing questionnaire is self-completed questionnaire that allows the researcher to collect quantitative data, which can be studied quantitatively by means of descriptive statistics and hypothesis testing (Saunders et al., 2012, pp.176-178). Self-completed survey requires relatively lower cost and it saves time in comparison to telephone or structured interviews (Saunders et al., 2012, p.420). Of course pitfalls of self-completed questionnaire can be listed as follows: missing interviewer to understand difficult questions, that can lead respondent to skip some questions, respondents might to skip not salient questions, respondents can read the whole questionnaire before answering the first question and thus develop an attitude towards it (Bryman & Bell, 2012, p. 234). While the pitfalls of the structured-interview were identified as follow: difficulty to arrange schedules, longer preparation in advance, and interviewer can ask different questions in different order (Bryman & Bell, 2012, p. 234). Taking pitfalls of both choices in consideration, we have selected self-administered questionnaire. In order to minimize the bias we decided to use those two survey distribution methods internet-based questionnaire and manual distribution. As Bryman & Bell (2012, p. 452) states, self-administered questionnaires tend to be composed of closed questions. In open questions respondents pronounce their opinions, while in close questions, respondents are given opportunity to choose from predetermined alternatives of answers. As Bryman & Bell (2012, p.249) states, advantages for closed questions, they are easy to processed.

Web-based questionnaire saves money and it can be sent out to thousands of people at the same time (Gillham, 2000). In addition to that, respondents have the flexibility to answer the survey at the most convenient time for them. Due to less pressure respondents are exposed to, we can expect unbiased responses (Bryman & Bell, 2005). Gillham (2000) brings up the fact that the respondents are anonymous in a web-based self-administered survey and this aid to collect unbiased survey responses. On the other hand manual delivery method increases the participation of the respondents which help to collect enough samples in a limited period of time (Saunders et al., 2012, p.421). Another method of questionnaire delivery is via post. Yet, as Saunders et al., (2012) mention, it has a very low rate of return only 30 - 50%, it is time consuming 4 - 8 weeks from posting, and it is costly (Saunders et al., 2012, p.421). After considering all alternatives, time horizon and financial means, we agreed to apply both web-based and manual distribution methods rather than postal delivery, distribution methods (Saunders et al., 2012, p.421). We believe that the chosen strategy suits the research question the most and it will enable us to fully describe the relationship between demographics and smart-phone usage.

2.7 Time Horizon

Saunders further identifies two kinds of time horizons, longitudinal and cross-sectional depending on the time scale of research (Saunders et al., 2009, p. 155). When researcher addresses a problem or tries to answer questions at a particular time, he/she executes research in cross-sectional time horizon, so the researchers are more likely to adapt

survey or case study (Saunders et al., 2009, p. 155). Yet when conducting research over a longer period of time, comparing stages over an extended period of time, research tends to apply the longitudinal time horizon approach. Taking in consideration the fact that mobile advertising is in fact a new marketing strategy, growing rapidly from 2007, and our research is cross-sectional, meaning that it is a snapshot of the current situation that does not examine change over any specific time period (Saunders et al., 2009, p. 155). Our decision of using the survey strategy of collecting data also fitted the cross sectional method as it is a common data collection method when doing cross sectional research (Saunders et al., 2009, p. 155). In our research strategy, we do not require to obtain control over respondents during the data collection since this cross sectional study happened in the present time horizon (Saunders et al., 2012, p.190)

2.8 Choice of theories

Literature review in general as well as in our case was conducted in order to state accomplishments and theories applied in previous research (Saunders et al., 2012, p. 603). In the scope of our thesis are following concepts message content, customer attitudes towards mobile advertising and its effect on purchase intention, personalisation, permission and flow experience and its effect on customer purchase intention. Based on previous research and theories we built up our conceptual model that is presented in following chapter. By applying relevant theories regarding advertising value, message content, customers' attitudes and flow experience, we assured our model is in depth reflecting upon existing theories.

At the beginning, we present mobile advertising in general terms of its relation to marketing, its forms and execution. It is later when we apply the theory of advertising value developed by Ducoffe (1995) and reflect upon significant factor of advertising message that affect customers' attitudes towards mobile advertising such as credibility, informativeness, entertainment, and irritation. Those factors have proved to be relevant for any form of advertising message communicated via traditional as well as new media channels and over time. Level each factor is intensified directly affect customer attitudes (Ducoffe, 1995). We find this theory important because it helps us to investigate which factors of message content influence customers' attitudes significantly.

Ducoffe (1995) describes the factors of message content and their effects on attitudes while Csikszentmihalyi (1975) defines the experience of feelings and emotions customer goes through when involved in certain activities. An individual can lose a sense of the environment that surrounds him, track of time, and be totally immersed in the certain activity. We find his theory highly relevant because we believe environment can be adjusted and created by advertisers in order to deliver the best flow experience. His flow theory was developed by observing artists painting picture. Yet researchers Novak&Hoffman (1996), Hausman& Siekpe (2009) combined it with human-computer interaction theory and specific atmospheric cues described by Eroglu et al., (2011), Constantidines (2004), Zhang et al, (1999). Aforementioned theories proved that customers undergoing the flow experience in the online environment intend to buy more. Since majority of mobile marketing takes place on the mobile Web, we apply those theories to investigate their relevance for mobile online environment. Therefore, we apply those theories in our research about customers in Umeå, Sweden. By doing so, we intend to examine validity of those theories in Sweden as a different cultural background.

2.9 Criticism of sources

As Saunders et al., describe primary data are such researcher collects himself/herself and secondary data describes as those collected already for purpose of another research (2012). Primary data are preferable for their accuracy, since their collection is tailored to the specific purpose yet secondary data are easily collected at lower costs (Saunders et al., 2012). For the purpose of our thesis we applied both types of data. Primary sources consist of self-administrated questionnaire and our secondary data consist primarily of academic research articles, scientific articles, conference papers, and industry annual reports.

When conducting self-administered questionnaire we based our design of survey on previous studies. List of all applied questions and their origin can be seen in appendix 1. When searching for secondary references we selected following criteria: high-quality, credibility, time scope relevance, preferable articles from 21st century and geographical relevance of a sample. In order to guarantee selection of such data we have assembled scientific articles from EBSCO (Business Source Premier), Elsevier Publisher (www.elsevier.com), EMERALD Group Publishing (www.emeraldinsight.com) and Google Scholar (www.scholar.google.com). We believe such a criteria helped us to select the most relevant articles of all. According to Saunders et al., (2012, p. 84), such articles are suitable, because they are written and evaluated by experts. Furthermore, we collected information via references in the refereed academic articles. Before applying findings of academic articles to our research we also evaluated good quality of research and strength of theory (Saunders et al., 2012). To eliminate misconception, misrepresentation, and bias, we collected information from original theories of Ducoffe (1995, 1996), Csikszentmihalyi (1975), Hoffman & Novak (1996) as well. We decided so due to the fact that possible bias can be concluded when applying findings from secondary references of original theories. Thus as Saunders et al., (2012) suggest original articles can be more reliable and of high credibility, because we as researchers are the only one representing those data and theories in our thesis for the first time.

When searching for relevant articles in databases, we have applied following key words: atmospheric cues in mobile, attitudes towards mobile marketing, attitudes towards mobile advertising, flow experience and relation to purchase intention, customer purchase intention in m-commerce, personalisation of advertisement, permission based marketing. When selecting articles we enhanced the credibility by selecting those that were cited in another research papers. Among all secondary data we also applied annual reports of marketing industry and market research reports. Magazine articles and in case of those we are cautious of the fact that those sources might be affected by subjectivity (Saunders et al., 2012).

Chapters two and four, reflecting upon scientific and practical research methods are developed upon books from Bryman & Bell (2012) and Saunders et al., (2009; 2012) and Shiu et al., (2009). Since their authors have dedicated their careers to research about research methods either within social studies or business administration, we assume they are of a high credibility and relevance.

3 Theoretical framework

This chapter provides more information about previous industrial development, research on consumer attitudes toward mobile advertising. It highlights the concept of flow theory and its relevance to mobile marketing attitudes and factors that influence consumer purchase intention. Furthermore an explanation of the model to be used in the research is provided and state relevant hypothesis.

3.1 Mobile advertising

According to Ünal et al., (2011) mobile advertising is a dimension of mobile marketing that concentrate on advertising. The first form of mobile advertising customers could have experience was a SMS in 1997 (Ünal et al., 2011). SMS is one of the most spread and popular forms of mobile advertising, regardless the region, it gained its popularity among marketers mainly due to high rate of personalisation, and low price for campaign reaching a large proportion of targeted audience (Jayawardhena et al., 2009). According to Information Handling Services, henceforth only as IHS, and the Interactive Advertising Bureau, henceforth IAB only, it accounts for 10% of total mobile marketing spending in 2011 (IAB, 2012; IHS, 2014). Compare to traditional forms of advertising, SMS can consider the most cost efficient digital forms of advertising and its popularity is enhanced by customers who opened and read 99% of marketing messages (Schiff, 2013). On the other hand, the limitation of SMS lies in its low creativity and restriction on only text messages up to 160 characters (Chen & Hsieh, 2011). It is also popular because it helps marketers reach the majority of their mobile consumers regarding the type of Smartphone their own. On the other hand, MMS advertising is expected to achieve more popularity (Schiff, 2013).

However, new and more technically advanced forms of mobile advertising occurred, the most commonly used form of mobile advertising is still SMS (Chen & Hsieh, 2011). For the purpose of this thesis, we will list and mention such a mobile advertising form that are performed on smart-phones and are currently gaining popularity among advertisers and marketers.

3.1.1 Mobile advertising performed on smart phones

Mobile advertisement is usually performed and consumed on the mobile Web. The widely spreading adoption of 3G and 4G smart-phones consequently leads to shift in accessing Internet from the desktop to Smartphone internet. There are more than 1.4 billion Smartphone users in the world and the Smartphone penetration exceeds 20 % at the moment (businessinsider, 2013). As you can see in figure 3, after 2007, mobile broadband penetration has been increasing rapidly and it overtook the slow growing fixed broadband penetration. Taking in consideration activities consumers perform via Smartphone and the time they spent on it, the Smartphone becomes a new digital channel for marketers to target their customers, improve the customer relationships and acquire new customers (Bruemmer, 2007). A website on a desktop computer displays additional links and information but mobile web pages are optimized to-the-point due to the limited screen display capabilities (Beqrious, 2014).

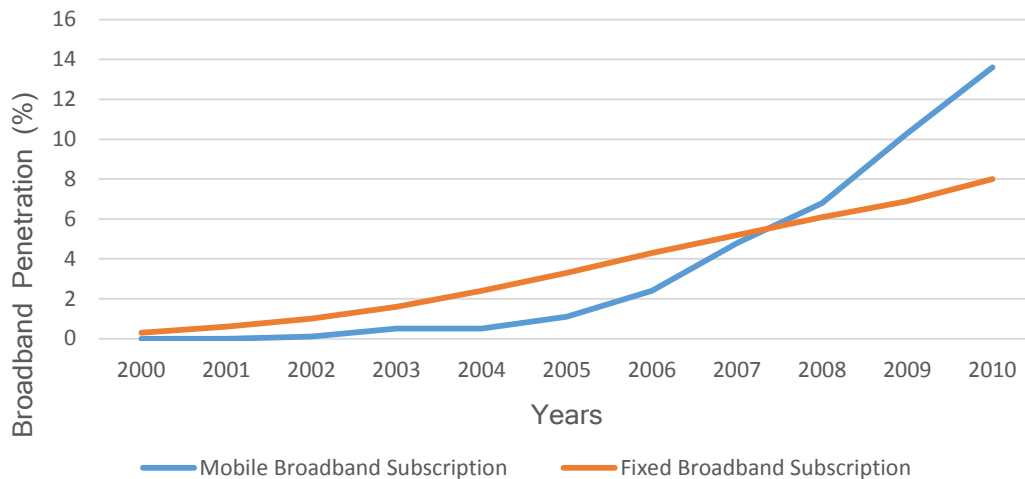


Figure 3. Mobile vs. Fixed Broadband Subscription. Source: World Bank Group, 2014

Consequently, the users have the possibility to focus on most essential information they are looking for. This is a perfect match with the modern busy lifestyles of the consumers. Thus, the increased adaptation of Smartphone opens up new opportunities in mobile advertising (Persaud&Azhar, 2012). A decade ago Tsang et al. (2004) concluded in their research that mobile advertising is for sure going to be a future trend. After extensive study of academic articles, industry studies and white papers we can say that their prediction was indeed very accurate.

3.1.2 Forms of mobile advertising performed on smart phones

Special features of the mobile channel offer a higher degree of personalisation; availability and cost advantage create new opportunities for the companies to target their customers (Fahy &Jobberet al., 2012, p.269). Increased personalisation, narrowcasting, rich media messaging, even shorter content, interest in geo-location and gamification of mobile ads are some of the emerging mobile advertising trends in 2014 and those advancements will clearly help to take the upper hand in digital advertising era (Schiff, 2013). Based on reviewed academic articles and industry reports the following section will introduce mobile advertising forms performed on smart phones.

Display banner

Mobile Marketing Association(2011) defines banner as *“still image intended for use in mass-market campaigns where the goal is a good user experience across all mobile phone models, network technologies and data bandwidths. All Mobile Web Banner Ads must be clickable by the end user and may be placed in any location on a Mobile Web site. A Mobile Web Banner Ad may be followed by a Text Tagline Ad to emphasize the clickable character of the ad unit.”*Also known as Ad banner, it is a form of advertisement, that can be placed at the bottom or at the top or at the right or left side of display, in an application, in a game or when browsing the Internet. Its forms can vary from static JPEG and GIF format to rich media mobile video built in banner. It is popular for its personalisation and geo-location targeting. According to Gartner (2014) mobile displayed ads accounts for the widely used mobile advertising form and will continue to keep its prime over the forecasted period between years 2015 - 2017. However after this period it is predicted that mobile video ads will surpass due to the increasing usage and adoption of tablets (Gartner, 2014).

Mobile Video advertisement

Digital motion advertisement that appears before, in the middle or after video in a digital video content player. IAB (2014) states that mobile video on mobile devices is the fastest growing category in mobile advertising. Appealing to all human senses it overcomes the obstacle of limited screen. Tablet became the in-home device for consumption of video and its usage is almost comparable to TV in prime time (IAB, 2014). More specific form of mobile video ad is pre-roll video ad, that are played before a content customer has chosen to view and viewers anticipate its presence. Therefore the price of it is higher than in-banner video placement. In-banner placement has the advantage of pushing down the content to the full screen. Its length should be 15 seconds and less, in order to avoid driving customer away. IAB (2014) further states that in-app it is more effective, since the customer downloaded app with genuine interest.

QR code

It is an abbreviation form of Quick Response Code. QR code, allows consumers to scan digitally created code representing a web address and gain more knowledge about a product or service rather than information being pushed towards consumers (Kamphuis&Ramnarain, 2012, p.3). It is one of the most effective digital pull marketing strategies, offering customers possibility to engage in marketing activities, rather than invade their privacy. Habits of using older technologies and lack of familiarity with QR codes represent barriers in engagement and scanning of QR codes (Watson et al., 2013). Even though it is still not very famous form of advertising in most part of the world, it definitely is an emerging trend in mobile marketing (Beqrious, 2014). As Watson et al. (2013) conclude that the QR codes popularity lies in customers empowerment and feeling of control, compared to SMS that if not delivered upon permission can be viewed as intrusive.

Most of the studies have been conducted mainly about SMS as a form of mobile advertising. Therefore, we would like to expand the concept as a part of demographics, and examine which form of mobile advertising customers are most familiar with.

3.1.3 Mobile advertising execution

Wireless marketing is considered as a very promising marketing channel for its high level of effectiveness (Tsang, et al., 2004). Mobile advertising is commonly executed via Rich Media Mobile Advertising (RMMA) that allows multimedia applications to be encapsulated in different virtual mobile contexts, including mobile Web browsing or mobile applications (techopedia, 2014). Rich media messages are increasingly famous mobile advertising channel among Smartphone consumers due to the in-application interactivity via sound, video and gaming. Consumers can experience those advertising forms when watching mobile TV, in games, in applications, and at social network sites. It can be either permission based or location based.

Mobile TV/ Mobile video/ In-games

Time plays a crucial role. For a video advertisement to be effective viewers must be engaged in an activity for a long time (marketingweek, 2014). Therefore watching a feature movie on YouTube, Netflix or some other video sharing platforms represent the most effective channel. Playing games as seen at Google (Our Mobile Planet, 2013)

analytics, is one of the most common activities performed on mobile devices by both male and female in Sweden. The popularity of games is increasing as well as popularity of viewing the video. Therefore Gartner (2014), IAB & IHS (2014) predictions on an increasing usability of video ads is relevant.

In-Apps advertisement

As for the year 2014 there were over 800 000 Smartphone applications available at the App Store and Google Play a piece (mobithinking, 2014). The consumers' preference for mobile applications account for 89% of media time in mobile and 11% of time on the mobile web (Bosomworth, 2014). In 2010 Apple Inc. realized the possibility to monetize the growing popularity of applications, and at that time current CEO Steve Jobs, introduced iAd (Boulton, 2010). Bosomworth (2014) therefore suggests that marketers will focus more on Apps as their main mobile advertising channel in near future. However marketers might face the obstacle of apps overload and seek ways to overcome it the alternative solution is to include advertisement in the application or focus on responsive design, that allows customers to view website in a format suitable and designed for various operation systems.

Display and search via Internet browsers

Display and search advertising via Internet browsers doubled from 8% in 2012 to 16% in 2013 (PWC & IAB, 2013). The most important notion to be done here is search via desktop or PC search decreased by 3% between years 2012 - 2013 (PWC& IAB, 2013). Yet search conducted via smart phones increased by 100% over one year from 2012 - 2013 (PWC& IAB, 2013). Among the most popular Internet browsers are Google, Baidu, and Yahoo, these are in descending order (Think with Google, 2013).

Location-aware advertisement

Usually executed in the form of banner (IAB, 2012). Target consumer based on his/her profile, previous search behaviour or her timely inquiry in search engines. Geo-location provides the opportunity to create targeted advertisements by serving relevant and time bound offers dependent on whether a consumer is located near to a branch of a company (Kamphuis&Ramnarain, 2012, p.2). Such a form of mobile advertising is considered to be the most effective form, because it serves customers only relevant offers, based on personal preferences and permission, therefore removing initial obstacles in acceptance and thus leading towards high return on investment. However INMA (2014) states location-based advertisement should be a core for advertisers, marketers and advertisers are not sure whether consumers perceive location-based advertising as a spam or as a good deal. Furthermore, mobile devices are a highly personal medium that offers high level of interaction anytime and anywhere, thus giving marketers the opportunity to reach customers outside of the physical confines of home or office (Rohm et al., 2012). Mobility and the opportunity to reach customers anywhere, anytime is what is attractive about location-based marketing.

3.2 Consumer attitudes towards mobile advertising

Attitude can be defined as a person's "solely, evaluative or affective responses to the commercial stimulus, and does not refer to cognitive or behavioural response" (MacKenzie& Lutz, 1989, p. 49). An attitude towards advertising (hereafter as Aad) is defined by (MacKenzie& Lutz, 1989, p. 48) as a "*predisposition to respond in a favourable or an unfavourable manner to a particular advertising stimulus during a particular exposure occasion*" (MacKenzie& Lutz, 1989, p. 48). Advertising value is

described as an antecedent of Aad (MacKenzie & Lutz, 1989, p. 48; Ducoffe 1995). Attitudes have an irreplaceable place in advertising, due to the fact that advertising message relevance and/or personalisation, context and utility are vital to consumers' acceptance of advertising and enhance consumer purchase intention (Watson, et al., 2013). Recent and contemporary studies about attitudes towards mobile advertising based their conceptual framework on Ducoffe advertising value (1995). Ducoffe argued that advertising is perceived in a proportion to the value it creates for consumers (Ducoffe 1995). Dimensions of advertising value are reflected in the conceptual advertising model (Ducoffe, 1995) in a form of three variables: informativeness, irritation and entertainment. His conceptual model investigated whether those variables help to form a value of the advertisement, improve customer responses to the advertising messages and consequently to marketers and advertisers (Ducoffe, 1995). In his conceptual model he focused on whether what is said (informativeness) and how it is said (entertainment) contribute significantly to the advertising value (Ducoffe, 1995).

Ducoffe states that informativeness influence on consumer satisfaction and their buying decisions, it is the main reason why customers accept advertising as such and consequently influence consumer satisfaction and their buying decisions (Ducoffe, 1996). Techniques that offend or annoy customers will be perceived as irritating and thus reduces advertising effectiveness, limit customers' responses and create negative attitudes towards advertising message (Ducoffe, 1995). Entertainment in advertising, according to Ducoffe, serves the need of escapism and emotional release (Ducoffe, 1995). The results of his research state that entertainment of advertisement has a greater value over informativeness while irritation has a significantly negative effect (Ducoffe, 1995). Irritation in an advertisement decreases advertising effectiveness and when advertising applies annoying techniques, customers perceive the advertisement as an unfavourable influence (Ducoffe, 1995). Ducoffe's model is applicable for online advertising as well, and proves that variables of advertising value stand and have the same impact as in more traditional marketing channels and concluded that advertisers should communicate in the most informative way they are capable of in the most entertaining manner possible (Ducoffe, 1996). Based upon Ducoffe (1995, 1996) findings consequential research regarding attitudes towards mobile advertising has been conducted over the scope of the past ten years by Tsang et al., (2004); Ünal et al., (2011); Liu et al., (2012); Watson et al., (2013); and Kim & Han, (2014).

Another factor of message content is according to Ducoffe (1995) credibility. Credibility as a factor of an attitude towards advertising is defined as 'extent to which the consumer perceives claims made about the brand in the ad be believable and truthful (MacKenzie & Lutz, 1989). Advertising credibility was investigated by MacKenzie & Lutz in 1989 and proven to have weaker than anticipated effect on attitude toward advertising (MacKenzie & Lutz, 1989). Tsang et al., (2004) enriched integrated Web advertising attitude model of credibility factor and investigated advertising value dimensions in the context of mobile advertising (Tsang et al., 2004). Yet Tsang et al. (2004) proved their expectation to be right and stated that all four attributes of mobile advertising message (entertainment, informativeness, irritation and credibility) significantly affect the attitude towards mobile advertising. The credibility of messages sent via mobile devices has a positive effect on the attitudes of consumers towards advertisements (Liu et al., 2012). Advertising credibility is often influenced by corporate credibility (MacKenzie & Lutz, 1989; Kim & Han, 2014). Credibility and infotainment have been proved by Liu et al., (2012) as having an effect on advertising

value regardless the cultural background. Consequently, when the message is sent from their familiar marketers, customers believe that the advertising message is trustworthy and they focus more on that message content rather than unfamiliar marketers.

Informativeness meets customer requirements to be informed of products and available alternatives in order to make purchases. Tsang et al. further states that it is a crucial factor of Web advertising effectiveness because customers view internet advertising as more trustworthy and more informative than traditional advertising (Tsang et al., 2004). The informativeness of advertising is the ability of advertisements to provide updated, timely, and easily accessible information to the consumers (Ünal et al., 2011). Informative dimension of advertising should provide consumers with useful and helpful resources, thus the quality of information provided have direct influence on consumer perceptions of the company and its products (Liu et al., 2012). Information communicated via mobile devices should be shorter, accurate, timeless, and useful for customers, if all those attributes are met, than only the advertisement is perceived without annoyance (Liu et al., 2012). The relevance of a message, increase purchase intentions among customers (Liu et al., 2012). As Kim & Han proved through their research, advertising that is trustworthy, containing relevant product information and that is delivered in timely manner cause customers to have a good perception and attitudes towards such advertising messages (Kim & Han, 2014).

Entertaining advertising message usually reflects upon customers' needs for diversion, aesthetic enjoyment or emotional release (Kim & Han, 2014). If message satisfies consumers' needs for escapism, gratification and pleasure, than they concentrate more on the messages and do not miss an opportunity regarding product information (Hoffman & Novak, 1996; Liu et al., 2012; Kim & Han, 2014). According to Tsang et al., (2004) entertainment is the most outstanding attribute influencing consumer attitudes towards mobile advertising. Entertaining dimension of advertising message enhances to build loyalty and expresses consumers' sense of pleasure related to messages (Ünal et al., 2011). To achieve the latter, it is important for a message to be short and entertaining (Ünal et al., 2011). In this respect, marketers include interactive games, music, and visual applications in many of their mobile advertising forms (Ünal et al., 2011). There is a desire of playing a game in human nature, particularly in children and youth (Ünal et al., 2011). Therefore, younger consumers are more willing to engage the advertising messages comprising entertaining games (Ünal et al., 2011). Pollay & Mittal (1993), reveals that hedonic pleasure had positive effects on attitudes towards advertisements. Enjoyable advertisement can catch the attention of a recipient and has a positive effect on consumer attitudes (Ducoffe, 1995; Liu et al., 2012). If the website provides fun, recreational and experiential use, than customer receive a positive online experience of the Web (Novak, et al., 2000). Information and entertainment values are usually entwined with each other in the modern technological savvy world (Liu et al., 2012). In this study, informativeness and entertainment are also integrated into a single construct called infotainment for simplifying the analysing process.

Irritation can occur when advertisers do not take the individual segment groups' needs into consideration and rather send large scale of mobile advertising messages for its low cost (Ünal et al., 2011). It can be further described as a degree to which advertising message cause consumers to feel irritated or perceive Web as a mess (Kim & Han, 2014). The interactivity of an Internet advertisement may be provided an overwhelming amount of information (Liu et al., 2012). Companies sometimes broadcast their

advertisements via economical forms of mobile advertising channels without considering personal needs and interests of the receivers. As a result, most of the receivers of those irrelevant messages are disturbed due to the improper marketing campaigns (Ünal et al., 2012). Scale of irritation to some extent depends on cultural background, because as Liu et al., (2012) examined consumer attitudes towards mobile advertising across Austrian and Japanese cultures vary. In low-context and individualistic cultures tend to perceive advertising as irritating, misleading and promoting materialism. In order to get rid of this problem, most of the web browsers provide an option to skip unwanted advertisements (Kim & Han, 2014).

Incentives are related to sales, more specifically promotion, competitions, discounts, coupons, vouchers and gifts as a reward for making a purchase or taking any other beforehand specified sales-related action (Percy & Elliott, 2009). Consumers agree more likely to receive advertisements comprising special financial rewards or incentives of other kind (Tsang et al., 2004). Varnali et al., (2010) shows that incentive has a significant effect on advertising campaign's attitude. In a further study conducted by Rohm et al., (2012) reveals that meaningful incentives could restrain negative perceptions such as risk perceptions towards mobile advertising. Kim & Han (2014) have shown the importance of tailoring the incentives in different types of Smartphone advertisement channels (e.g. SMS, MMS and rich media advertisements). After the consideration of the above four factors related to message content, we propose the following hypothesis:

H1: a) Perceived infotainment, b) credibility and c) incentives of mobile advertisements have positive effects, d) while irritation has a negative effect on consumer attitudes towards mobile advertising.

3.2.1 Personalisation

Georgiadis&Manitsaris (2005) states that Web users pose various skills and abilities, and continue with the definition of personalisation. Personalisation is probably the biggest advantage of mobile advertising is to reach customers anytime and anywhere, including high rates of personalisation, interactivity and low costs (Jayawardhena et al., 2009). Customers since the 70's have a negative attitude towards advertising messages and found them intrusive and irritating (Ducoffe 1995). Ducoffe (1995) later claimed that if advertising message is overwhelming in information, customer feels irritated. Yet such a status have been slowly changing due to the fact that customers prefer to receive mobile advertising messages that are tailored to their interests, lifestyles, previous searching inputs and thus to be personalized (Kim & Han, 2014). Due to the rapid development of technologies, broadband connectivity and smart phone penetration, mobile advertising are a growing trend that enables advertisers to reach customers with personalized content (Chen & Hsieh, 2011). It provides advertisers with the option to create a positive experience and to improve their relationship with customer (Ünal et al., 2011). Personalisation can decrease irritation caused by irrelevant content, as well as negative attitudes towards advertising (Kim & Han, 2014). Mobile advertising can be easily personalized based on time, geographical location and customer priorities. To leverage personalisation to the full, companies should collect data about their customers and analyse them appropriately, thus target individuals with a tailored mobile advertising message. Such an action would decrease irritation and thus improve attitudes towards advertisers and advertising (Ünal et al., 2012). As Kim & Han (2014) state further more customers are receptive to advertising that is personalized and

relevant to their lifestyles. Thus, as aforementioned advertisers should follow customer profile, consumption patterns and needs (Kim & Han, 2014). If personalisation would be applied together with permission advertisers and marketers would remove perceived risk and thus enhanced positive attitudes towards mobile advertising (Kim & Han, 2014). Therefore, we propose:

H2: The personalisation of mobile advertisements has a positive effect on attitudes towards mobile advertisements.

3.2.2 Permission

Scornavacca&Scornavacca(2004, p. 133) describe permission as the “dynamic boundary produced by the combination of one’s personal preferences”. Advertising messages that are sent only to customers who have unambiguously expressed their willingness to receive such messages is called permission-based advertising (Tsang et al., 2004). There is an increasing trend towards unauthorized SMS advertisements (Barwise et al., 2012, p.15). With permission-based advertising, consumers gives the permission to marketers to receive information and advertising messages only about relevant products and services they have chosen beforehand, thus they experience less irritation (Tsang et al., 2004). Since consumers participate in marketing activities voluntarily, 30% higher response rate can be observed (Ünal et al., 2011). Ünal et al., (2011) further proves that permission has a positive effect on attitudes towards mobile advertising. Therefore, marketers send only the permitted products and services related mobile advertising messages to their consumers. In addition to that, it helps to reduce the risk of exploiting personal information of the consumers (Ünal et al., 2012). The study conducted by Ünal et al.,(2011) reviles that explicit permission is essential in mobile advertising and distribution of advertising messages without consumer permission leads to increase in irritation among consumers. As a result, consumers tend to delete annoying messages, omit content of advertising message without reading and develop negative attitudes towards advertisers and advertising. According to the research findings of Jayawardhenaet al.,(2009), trust in marketer is the most important determinant of permission based mobile marketing. Thus, “*mobile marketers should focus on building a strong, positive media presence and image, and thereby influence consumers’ likelihood of giving permission to mobile based marketing*” (Jayawardhenaet al., 2009).In many countries, the legal system bid prior permission from the customers, before the mobile advertising messages delivered to the consumers (Ünal et al., 2011; EC 2013). Especially in Europe, marketers are required to seek consumer approval before execute any mobile marketing campaign (Kautonenet al., 2007). In short, explicit permission from the receivers becomes obligatory requirement in mobile marketing (Kautonenet al., 2007). Consumers want to have control over their mobile device that they perceive to be mainly for personal communication usage (Watson et al., 2013). Based on common experience with spam in an email, consumers perceived risk and anticipate to be stalled with spam in their smartphone. If permission is obtained the perceived risk is minimized (Jayawardhena et al., 2009; Ünal et al., 2012; Watson et al., 2013).Based on arguments stated above, we propose following hypothesis in our study:

H3: Permission has a positive effect on attitudes towards mobile advertising.

3.3 Flow theory and experience

In the early 70's Csikszentmihalyi (1975) developed the concept of flow experience and has been additionally contributing to the research over the past 20 years (Novak et al., 2000). Over the time flow has become a well-established term in intrinsic motivation field, educational sector and psychology (Csikszentmihalyi, 1988). The inception of flow is associated with experimental observations of male artists. Concluding that the enjoyment and rewards came directly from the engaging in the activity, painting, itself. Maslow, who has been involved in creating conceptual ground bases for future research regarding flow and experience, describe the intention of engaging in activity as a need for self-actualization, in order to explore one's potentials (Csikszentmihalyi, 1988). Csikszentmihalyi (1988), suggests in his further research that such an engagement is driven by the need of enjoyment, common for engagement in play and common to humans and to rats and monkeys as well (Csikszentmihalyi, 1988). Such a hypothesis is based on arousal concept, proving that even monkeys and rats engaged in activities driven by curiosity, novelty, and competent drivers (Csikszentmihalyi, 1988).

Further, based on Csikszentmihalyi model, Hoffman & Novak (1996) defines flow as a *“cognitive experience during online navigation that is determined by (1) high levels of skill and control; (2) high levels of challenge and arousal; (3) focused attention; and (4) is enhanced by interactivity and telepresence.* Chandra & Richard (2005) mention additional inhibitors of flow, such as long downloading time, delays to download plug-ins, failure of navigation links, bring or not intuitive sites, slow responses, challenges greater than skills. Firms according to Chandra & Richard (2005) should maximize flow by providing customers with a feeling of control and experiencing interactivity. Among the most outstanding variables of flow belong challenge, skills and interactivity.

3.3.1 Flow experience and attitudes

Flow theory has been developed by Csikszentmihalyi (1975). Later, after Csikszentmihalyi, Hoffman & Novak, (1996) explored in their research that Web sites create an online environment, where consumers can see flow experience. Flow theory has been used as a metric in research of online consumer experience (Koufaris, 2002). As Huang (2011) describes, since flow is enjoyable, arousal experience, it is more likely to consumers to build a positive relationship towards Web sites that provide flow experience. Online gaming can provide users with the same level of enjoyment, arousal and engrossment and thus leads to repetitive engagement with the game (Huang, 2011). A study conducted by Guo & Poole (2009) examined the relationship between the complexity of web site and flow (Kim & Han, 2014). Researchers found that clear goal, feedback mechanisms and balance of challenge and computer skills are important factors (Kim & Han; 2014).

Consumers through interaction with Web engage in human-computer interaction and experience flow (Huang, 2011). According to Hausman & Siepke (2009) websites are designed to enhance usability to. Positive attitude towards advertising can be achieved by full-filing Csikszentmihalyi's factors of flow experience: timeless, Telepresence, concentration and enjoyment (Koufaris, 2002). The traditional brick-and-mortar environment can enhance positive attitudes that potentially can build up purchase intentions (Wu et al., 2013). Positive attitude can be enhanced when a website is well constructed, making the transaction process easy and thus enhancing usefulness (Hausman & Siepke, 2009). Skills in model developed by Novak et al., (2000) plays an important role as well, he states that website should be design in such a way so it offers

enough challenge to arouse, but not more because it may create frustration (Novak et al., 2000). Taking in consideration Ducoffe's model, when the customer perceives an advertising message to be valuable, they become more focused on it and thus experience flow (Kim & Han; 2014). Therefore, we propose the following hypothesis:

H4: Flow experience of mobile advertisements has a positive effect on attitudes towards mobile advertisements

3.4 Attitudes towards mobile advertising and purchase intention

Attitude is the consumer's liking or preference for product attributes, which summarizes the criteria that consumers use to make decisions regarding what products to buy (Kinnear, 1996).

People engage in computer-human interaction because they believe it will improve their performance and improve their lives (Hausman & Siepke, 2009). Further, they incorporate flow theory in their model as a predictor of purchase intention and argue that effective online shopping environment must be fun, comfortable and increase likelihood of a purchase. Regardless the increasing adaptation of smart phones and their improving functionalities, negative attitude towards mobile marketing communication in general persist over the scope of the pre - Smartphone era until now (Watson et al., 2011; Tsang, Ho, Liang, 2004;). However, previous research shows a negative attitude towards mobile marketing in general further detailed research that has focused on attributes of mobile advertising, message content, built on Ducoffe's model of advertising value shows that personalisation, relevance of information, entertainment, informativeness, credibility, incentives and less irritation based on permission to deliver advertising messages improve mobile marketing acceptance and creates positive attitudes (Kim & Han, 2014). Yet researches vary in their suggestion what exactly enhance deeper intention. Some say its enjoyment, credibility, organizational user empowerment, and informativeness (Hausman & Siepke, 2009). Others argue for stimulation of the sensory senses as a tool to make visitors and customers visiting again. Overall, based on previous research, we can see that Website design features play a role when engaging the visitor and emphasizing user satisfaction. Chen & Wells (1999) suggest that e-commerce can be positively perceived if it is fun, informative and combined with good design and web development. Deeper involvement in media enhances purchase intention. Korzaan (2003) states that attitude has a significant effect on purchasing intention and that can be used as a predictor of online purchase transactions. Therefore, we propose following hypothesis to testify the effect of the consumer attitude towards purchase intention:

H5: Consumer attitude towards mobile advertisements has a positive effect on consumer purchase intention

3.4.1 Flow experience and purchase intention

Marketing research and literature state that flow experience influence consumer behaviour and decision-making process (Jayawardhena, 2004). As Koufaris (2002) found, flow experience positively affects purchase intention. Further, Koufaris (2002) introduces a concept, when he combines theories from marketing, psychology and information systems in order to address consumer as both a computer user and consumer. Constantinides (2004) argues that in order to develop and provide customers with pleasing Web experience, marketers and advertisers must at first identify and

understand what Web components have this ability, so they can utilize and leverage their value (Constantinides, 2004). Furthermore Korzaan (2003) tries to cover a gap between facts that flow experience is positively related to purchase intention and to the fact that marketers and advertisers still lack the knowledge how to provide experience of flow in the online environment (finpro,2014). Thus,Korzaan (2003) builds a study based upon Novak's research about telepresence, challenge, control, focused attention and interactive speed. Consequently, he proposes flow to be important independent because it refers to network navigation over Web session (Korzaan, 2003). This statement is related to atmospheric cues and therefore in our study we examine the generic Website design, skills, flow, control and Website quality of Koufaris (2002) and Novak et al., (2000) attributes of flow. To understand what consumers experience online and how they behave has become essential in time of digital commerce (Korzaan, 2003). Novak et al., (2000) state that website that offer full information enhances the customers' decision making process. Flow is endorsing and enjoyable experience when interacting with Web, that leads individuals to develop positive emotions, when experiencing flow, individuals much more likely create likelihood, satisfaction and loyalty (Huang, 2011). Positive online experience causes a positive attitude towards marketer and negative online experience makes sixty % of customers to change their opinion about brand and even switch brands at the time of purchase (Constantinides, 2004). Thus, marketers and advertisers would gain an extra competitive advantage and remain its customer base, if they would learn and understand the parameters affecting the customer experience before they design and built their online venture (Constantinides, 2004). Huang (2011) proved that online stimuli positively affect and deeper flow experience and further intention to buy. We propose:

H6: Flow experience of mobile advertisements has a positive effect on consumer purchase intention

3.5 The Models used

Korzaan (2003) conducted a research to find the relationship between physiological flow, exploratory behaviour and consumer attitudes among the undergraduate students. The regression analysis results reveal that flow as an important independent variable influencing both exploratory behaviour and consumer attitudes (Korzaan, 2003). The theoretical model explains 60 % of the consumer's intentions to make purchases online (Korzaan, 2003). Korzaan (2003) points out the importance of future research on the flow experience effect on consumer attitudes. This study provides some useful recommendations for the website design and quality of the website based on the flow experience related factors identified by Novak et al.,(2000). Those recommendations help to facilitate a positive flow experience as well as an attitude about online purchases on the consumer's mind. To the best of our knowledge, no studies have been done about the flow experience effect towards consumer attitudes in the past decade.

Another study carried out by Ünal et al., (2011) in order to find out the relationship between consumer attitude, purchase intention and acceptance-rejection behaviour among adult and youth in Erzurum/Turkey. According to the results, an advertisement's being entertaining, informative, reliable, personalized and its being sent with the permission of the receivers has a positive effect on consumer attitudes towards mobile advertisements. The relationship between message content (informativeness, credibility, entertainment, incentives and irritation) and attitudes towards advertising in the Ünal et al., (2011) reveals the same regression analysis results in comparison to

Haghirian&Madlberger (2005). Ünal et al., (2011) successfully adapted the theory of Reasoned Action (attitude, intention, and behaviour) developed by Fishbein and Ajzen (1975) in their study. Getting permission beforehand is an important factor in Ünal et al., (2011) study. Ünal et al., (2011) also reveals that youth pays more attention to the personalisation of the message and no irritating content of advertisements than adults do. In a study conducted by Xu (2007) in China, found personalisation as an important factor towards women's attitudes towards mobile advertising. However, gender is not considered as an influential factor in this study. Ünal et al., (2011) points out the importance of examining the role of other elements in creating an attitude towards mobile advertising in future studies.

Kim & Han (2014) conducted further research on mobile advertising in relation to why smartphone advertising attracts customers, focusing on university students in Seoul South Korea. Advertising value and the flow experience are the key determinants of the consumer purchase intention. Their model also explains that, personalisation, flow experience and advertising value are mainly related to informativeness, credibility, entertainment, incentives and irritation. The dimension credibility of Kim & Han (2014) complies with the dimension concerning perceived risk of Bauer et al (2005). Relationship between message content (informativeness, credibility, entertainment, incentives and irritation) and advertising value in the Kim & Han (2014) reveals the same regression analysis results in comparison to Haghirian&Madlberger (2005). This study suggests a comprehensive Web advertising model, which mainly targeted to find the personalisation and flow experience in understanding the influence processes in related to the smartphone advertisements (Kim & Han, 2014). Kim & Han (2014) also take consumer demographics into account when studying consumer attitudes toward mobile advertising. However, their findings show that demographics do not have any major influence on the attitudes of consumers and the similar result (Kamphuis&Ramnarain, 2012). The regression analysis results show that personalisation as well as flow experience has positive associations with informativeness, credibility, incentives and entertainment of the advertising message while having a negative association with irritation. Summary of the results state that when customers perceive smartphone advertisements to be useful, important, and valuable, then the consumers experience flow in the advertisement and intend to purchase goods or services. Moreover, they have found that flow experience in smartphone advertisements plays a critical role in purchase intention. Kim & Han (2014) point out the importance of further investigation of the relationships between flow experience, personalisation, incentives, attitude and some demographics factors towards purchase intention in order to fill the research gap in the smartphone advertisement context.

3.6 Conceptual model

The above mentioned Korzaan (2003), Ünal et al., (2011) and Kim & Han (2014) conventional models and their suggestions for future research are considered when we have constructed the testifiable conceptual model (see figure 6.). Theory of Reasoned Action developed by Fishbein and Ajzen, personalisation and flow theory were helpful when we develop the research model of this study. Factors such as informativeness, credibility, entertainment and irritation influence on advertising value have been testified several times in the previous studies. Therefore, advertising value is not considered as a testifiable factor in our study. Kim & Han (2014) showed that incentives have a significant positive relationship with advertising value. But we have

considered incentive as part of the message content in the conceptual model and identified the relationship with attitude rather than advertising value. Therefore the informativeness, credibility, entertainment, incentives and irritation are considered as message content and the effect of message content on attitudes is going to testify in this study.

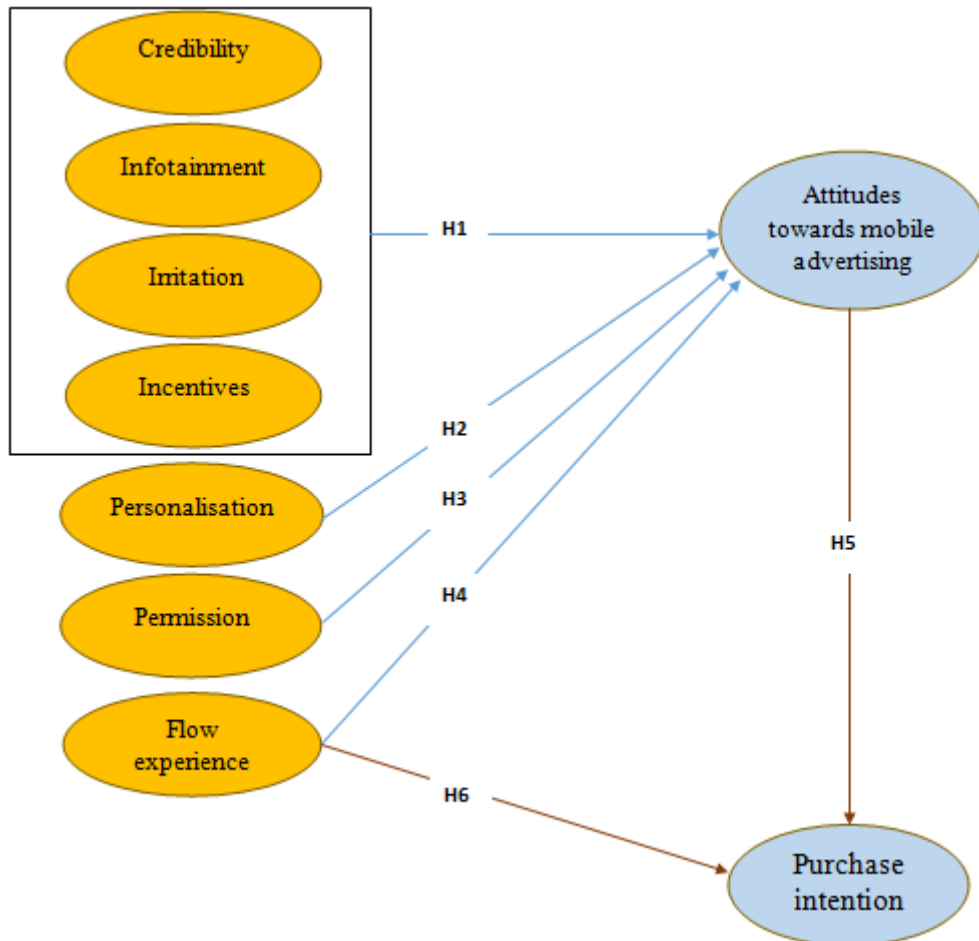


Figure 4. Conceptual Model

4 Practical Methodology

This chapter explains options and selection of particular research methodology tools, and their impact on our study. Further, we state how data have been collected and lastly we demonstrate our research methodology choices in a graphic manner.

4.1 Operationalization and measurement of variables

In the theoretical framework we identified the relationship between various concepts that we considered relevant for the study. Relationships between those factors stated as hypotheses in our conceptual model, (see figure 6). Afterwards we followed the operationalization process in order to transform main concepts into more reliable measures of variables, which are easily understandable by the respondents (Nardi, 2003; Svensson, 2005). Since measurable variables in our study are mainly adapted from related previous research, reliability of a research increases (Bryman & Bell, 2011, p. 263). Saunders recommends maximization of validity, reliability and response rate (Saunders et al., 2012, p. 419). Those recommendations stand for careful design of individual question. Our questions are based on previous academic articles and research that examined same factors in different environments, conditions and relation to other factors. Credibility is measured with two items adapted from Kim & Han (2014) and Watson et al. (2013). Measures of infotainment are based on Ünal et al. (2011); Liu et al. (2011) and Kim & Han (2014). Incentives are measured with three elements of Ünal et al. (2011). Irritation is measured with two items based on Ünal et al. (2011) and Kim & Han (2014). Measures of personalisation are modified and adapted from Ünal et al. (2011) and Kim & Han (2014). Two measures for permission are amended from Ünal et al. (2011). Measures of Flow experience are evaluated with six items based on Zhang et al. (1999), Cho et al. (2003), and Kim & Han (2014). Purchase Intention is gauged by three elements of Ünal et al. (2011) and Kim & Han (2014). Details of a scale are provided in Appendix 1. All the questions related with hypotheses in the conceptual model were measured using the five-point ordinal Likert scale, where one always represents “strongly disagree”, and five represents “strongly agree” (Bryman & Bell, 2012, p. 239). Such a scale measures non-metric data. In addition to that, five-point Likert scale is used in all the questions that relate to the hypothesis in the conceptual model. Thus, the consistency of our survey questionnaire is assured.

4.2 Designing the questionnaire

In order to testify stated hypothesis, we designed a survey. Self-administered questionnaire was adapted to execute collection of data regarding consumers' attitudes, flow experience and purchase intention (see Appendix 3). The questionnaire had five parts. The first part covered questions regarding demographics and personal experience with receiving mobile advertising messages. Second part adapted message content variables from Ducoffe's model to investigate how customers' value attributes of message content such as credibility, infotainment, irritation, incentives. Attitudes towards mobile advertising were explored in the third part of the questionnaire by focusing on personalisation and permission. Fourth part covered flow experience obtained when browsing the Internet. Finally the fifth part examined consumers' purchase intention and whether they are influenced by mobile advertisement.

Before distribution of the survey, we have created a landing page, including a one minute video, as seen in appendix 2, in which we introduced ourselves, explained the

purpose of our thesis and suggested a co-operation to SME in Cambridge, UK. Suggested co-operation was in terms of a research among students, studying at the local University of Cambridge that at the same time are existing or potential customers of those restaurants and cafes. Investigation of their preferences and attitudes towards mobile marketing would be executed through survey and online questionnaire. Targeting such a sample was planned to be executed via Cambridge University International Student Team and Public Engagement team as well as via restaurants and cafe's profiles on social networking sites. Companies were contacted via e-mail, yet we have not received any response, thereupon we forsake contacting the University of Cambridge. Instead, we decided to apply the same concept here in Umeå, where we perceived independence when collecting data as a significant factor. Landing page was sent to several SME's. Yet scenario was similar, we have not received any response for our offer. Therefore a personal meeting followed up, some showed an interest in the topic yet would prefer planning period to start in November or December, some have shown no interest at all, reasoning their marketing strategy being executed primarily via traditional media channels, print, such as newspapers, magazine, journals, flyers or posters as being sufficient. Some shows satisfaction with their website and online promotion and no perceived need for mobile marketing. However two SME's showed an interest and a further communication was executed.

Before developing a questionnaire for the survey, we read suggestions for designing questionnaires by Sanders et al., (2012); Bryman & Bell & Bell, (2011); and Nardi, (2003). As Saunders et al., (2012) state, there are two forms of questionnaire: self-completed and structured-interview. Questionnaires used to be implied for explanatory or descriptive research Saunders et al., (2012) further suggest to investigate customers' attitudes via structured interview, where the interviewer has a chance to explain complex questions (Saunders et al., 2012, p.420-422). However, being aware of the low response rate for long questionnaires we tried to develop easy to understand and answer questions (Bryman & Bell, 2012, p.234). Respondents, in this self-administered survey, were anonymous. Thus, we informed respondents and assured them about privacy and the confidentiality of data management. "Clear wording of the questions using familiar and easily understandable terms, respondents can improve the content validity of the questioner" (Saunders et al., 2009, p. 432). The wording of a survey questionnaire can cause bias among the respondents, thus as suggested by Saunders et al., (2012), we applied to amend questions from previous research as well as looking at the example questionnaire in the book research methods for business students (Saunders et al., 2012, pp. 426-428). In order to increase understandability of questions and to minimize the knowledge gap between online and offline participants, we have tested questionnaires among 14 participants in total. Seven testers were asked about understandability, clarity and the layout of the questionnaire in accordance with the guidelines given by Saunders (Saunders et al., 2012, p.452). Their feedback was taken into consideration and questions were relevantly amended. Thus we ensured the content validity and reliability of the questionnaire. At first our working draft of questionnaire was designed in the English language, once questions were amended, translation into Swedish language took place and consequently testing by seven participants was executed. We have followed the guidelines provided by Saunders et al., (2012, p.442) and did a parallel translation in order to have the same meaning for both Swedish and English respondents (see Appendix 3). Questionnaires of both languages were available online as well as in self-administered version in order to reach sample of the entire population. Our survey

is less than seven and half A4 pages and it is an acceptable range for self-completed questionnaires (Saunders, 2012, p. 446).

For the purpose of creation of attribute variables, opinion variables as well as behavioural variables, we designed closed question only. Knowing that respondents used to decline with lengthy questionnaires, and taking in consideration the broad concept of our study, closed questions were applied in order to not require additional effort from respondents, limit irritation and maximize completeness of questionnaire. Attribute variables reveals the characteristics of the respondents (Saunders et al., 2012, p. 425). Age, gender, level of education is some of the attribute variables in our study. According to Saunders et al., (2012) attribute variables are helpful to find how opinions and behaviour among respondents and check whether the collected data truly represent the sample (Saunders et al., 2012, p.425). Opinion variables help to find how respondents feel or what they think about a subject (Saunders et al., 2012, p. 425). Many of our questions regarding independent variables are based on opinion variables. The behavioural variable shows how a person behaves, meaning it shows what a person did in the past, does at the present, or is going to do in the future (Saunders et al., 2012, p. 425). As an example, a question regarding how often do you view and read mobile advertisements on a smartphone would provide a behavioural variable in our study.

Most of the questions are closed questions in our survey, so the respondents were able to answer questions quickly and easily (Saunders, 2012, p. 432). We have started attributing variable questions in the beginning of the survey and included behavioural and opinion variable questions subsequently. Thus, we followed a logical flow in the questionnaire in order to get reliable and accurate responses from the respondents. We applied vertical design for closed questions (Bryman & Bell, 2012, p.237). Horizontal design was applied to questions regarding demographics

A Google form has been used to design our survey and it helped us to make questions clear and at the same time applying a simple layout. Short introduction about ourselves and the purpose of the survey was stated at the beginning of the survey. A progress bar was included to show the completed percentage in each section of the survey and thus provide online participants with a better time perception of their participation. Most of the questions in the questionnaire were mandatory, that helped us to make sure the survey is fully answered. Suggestions regarding clear presentation, were taken in consideration and thus questionnaire is divided into four sections and nearly 8 questions per section in order to minimize the scrolling and increase the understandability of the respondents (Bryman & Bell, 2012, p.237; Saunders, 2012, p. 421). For manually-administered questionnaire, we followed the same pattern. To enhance anonymity, we showed respondents their answers in statistic. We believe those steps helped us to build the trust among online participants and collect unbiased responses.

4.3 Sample strategy

Saunders et al. (2012, p. 261) states two sample selection techniques; probability sample and non-probability sample. In a probability sample, each respondent has been chosen randomly and everyone in the population has an equal chance to be a part of the study. Respondents are selected by the researcher in a non-probability sample and each case has been selected from the population is not known (Saunders et al., 2012, pp. 261-262). Bryman & Bell (2012, pp. 190-193) states, three types of probability sample techniques: simple random sample, systematic sample and stratified random sample. Simple random

sample is applied once the researcher has an access to a database of potential respondents. Then he can decide his sample size, divide it by population (number of items in the database) and the result provides researchers with sampling fraction. Such a fraction tells that for example, every one in 20 should be selected. Such a sampling technique does not give a chance for human bias (Bryman & Bell, 2012, pp. 191-192). When working with systematic sample, the sampling fraction is applied directly to the sampling frame (Bryman & Bell, 2012, pp. 190-193). Stratified random sample provides researchers with a sample that is distributed in a similar pattern as population (Bryman & Bell, 2012, p. 192). Probability sampling is often associated with the survey and it is easy to generalize the findings to the entire population in the sample frame (Saunders et al., 2012, pp. 262-263). On the other hand, generalizability of the findings is limited in non-probability samples (Saunders et al., 2012, p. 262). According to Saunders *et al.*, (2012, p. 272), a simple random sampling technique better suited for few hundred sample sizes. We have calculated required sample size based on the sample population in our sampling frame. Danielsoperonline statistic calculator for the student t-test shows that we need a minimum of 104 sample elements for the significant level 0.1 (danielsoper, 2014). Thus, after considering the above random sampling techniques and facts, we agreed that simple random sampling is best suited sampling technique for our data collection. We have taken necessary actions to reduce the bias and increase the randomization when collecting the data by internet and paper surveys.

Bryman & Bell (2012, p. 187) states that a sample is a true representative segment of the population that is selected for investigation. In our study, we consider smartphone users within Generation C to be in 18 and 34 years of age range, and middle age adults (age between 35 and 55) living in Sweden are considered as the population in this study. A significant proportion of the members in the generation C are still studying, thus their expenses on mobile purchases might be limited at the moment but possibly higher in the near future. Such an expectation enables us to make inferences to the population and make our studies of an interest in SME. On the other hand, middle age adults are matured customers who have higher purchasing power due. We didn't consider respondents younger than 18 years of age due to the ethical and legal restrictions for internet surfing and mobile gaming. According to Google, Our Mobile Planet (2013) figures, smartphone penetration among people who older than 55 years equal to 32% in Sweden, thus we assumed most of them are not used to mobile marketing and we didn't consider them in this study.

In order to reach probability sample, distribution, manual survey was administered by visiting various buildings on the Umeå University campus and campus cafeterias. Retail stores, cafes and restaurants in the city centre of Umeå. Such a distribution was performed in order to reach out to students, academic and administrative staff, employees, employers and customers. As Bryman & Bell (2012, p. 188) stated, personal judgments affect our actions, thus we selected street in the city and distributed questionnaires in each and single of them. One day care was visited to reach parents, this venue we consider as a place with the most random sample in our study. Online distribution was executed through private messages via social networking sites. However, Saunders et al., (2012, p. 420) argues that web-based questionnaire provides the highest response rate; we do not consider it the most unbiased because it highly depends what contact list or database researcher possess. When manually distributing questionnaires appearance or the status of the people was not taken in consideration, thus another measure of randomization was applied (Saunders et al., 2012). To fill in the questionnaire takes approximately 10-15 minutes. Once a questionnaire was handed out,

we made sure we are not standing any closer to the respondents, to cause pressure on them or to indicate choosing socially desirable options (Saunders et al., 2012, p.420). Respondents were given enough time to fill in. In case of employees and employers of retail stores, questionnaires were picked upon an agreement the following day, before closing time. Unfortunately, as Bryman & Bell (2012, p. 234) pointed out, we do not know who answered the questionnaire, whether it was really filled by employees or whether only one did it for all. The questionnaires were distributed among people currently living, working or studying in Umeå.

4.4 Sample size

According to Saunders (2012) the size of the total population, the tolerable margin of error, confidence interval we expect in the data and the type of analysis are the main determinants of the sample size (Saunders et al., 2012, p.565). Google Our Mobile Planet for the year 2013 shows that, smartphone penetration for the age range between 18 and 55 is equal to 86 % in Sweden (think with google, 2014). Statistics Sweden (2014) shows that the population in the aforementioned age range is equal to 65 402 (SCB, 2014). Therefore, if we apply national smart-phone penetration of 86 % of the Umeå city population between 18 and 55 years of age, then the population of Umeå city is equal to 56 246. According to Google, Our Mobile Planet (2013) figures, smartphone penetration among, female is 87, 4% and among male it is equal to 84, 7%. Based on excerpts from Statistics Sweden (SBC, 2013) we could see that there is a base of 33 492 males and 31 910 females in the 18 – 55 age range. Therefore, we can assume that male population of size 28 468 and female 28 089. Thus, male represents 50.4 % and female represents 49.6% of the population in this study. We have referred two trustworthy online sample size calculation methods to determine the minimum sample size for our study. Danielsoperonline statistic calculator for student t-tests show that we need a minimum of 104 samples for the significant level 0.1 (danielsoper, 2014). Calculator dot net sample size calculator reveals that we need a minimum of 96 samples for the 95 % confidence level for the 56246 population size (Calculator dot net, 2014). In order to obtain truly representative sample of Umeå inhabitants, and considering the population increase in 2014, we expected to collect at least 104 responses to our survey. Previous studies investigated issues related to mobile advertising with comparable sample size 380 responses by Ünal et al., (2011), 170 responses by Liu et al., (2011), 256 responses by Kim & Han (2014), 96 responses by Chen & Hsieh (2011), 176 by Huang (2011), and approximately 200 by Jayawardhena et al., (2009). Thus, we expected to collect similar sample size in order to provide reliable results of our analysis.

4.5 Data analysis

Online consumer responses were downloaded and paper questionnaire answers were manually entered into a one Excel file after we have collected enough answers for the analysis. When we were entering data to the Excel file, we created one grouping variable in order to indicate whether a particular record is taken from the online survey or a paper survey. The excel file is then converted into a data file in the SPSS software. Then we have coded survey questionnaire responses meaningful way, all the scale questions coded 1 as “strongly disagree” and 5 as “strongly agree” (Saunders et al., 2012, p.443). There was no need to reverse the coding of responses since our pre coded scale questions were well formulated. Therefore, miss-interpretations in the analysis of survey data are eliminated. Missing data analysis is not performed due to the

compulsory nature of all the relevant questions in the survey questionnaire. Next, we have transformed survey questions into the related factors in the conceptual model by dividing sum of the related questions from the no of related questions. Cronbach's alpha test has been done for all the constructs to assure the internal reliability and validity of the constructs and analyse the consistency of responses (Saunders et al., 2012, 430). Saunders et al. (2012, p. 430) states that each constructs need to have at least 0.7 out of one in order to prove the validity of the constructs.

4.5.1 Descriptive statistics

For the categorical data such as age, gender, education level, monthly income, current employment status and smartphone type, we observed only frequencies in order to examine how many of the respondents belong to a certain category. We did this for finding general information regarding the response quota of different categories. It further helped us to understand the sample distribution in different categories, in contrast to the population of our sample. Apart from the above mentioned categorical questions, there are some questions related to user experiences and expectations about mobile advertising. Pearson correlation coefficient is used to find how constructs are related to each other (Bryman & Bell, 2011, p. 347). The outcome of correlations ranges between -1 and +1, 0 represents there is no relationship between constructs (Saunders et al., 2012, p. 521).

4.6 Regression analysis

Regression analysis is a way of identifying whether there is a relationship between variables and further drawing conclusions about the population. Linear regression examines the relationship between a dependent variable and explanatory variables (Moore et al., 2011, p. 526). The simple linear regression model assumes that the variable y is normally distributed for every value of x with a mean dependent on x (Moore et al., 2011, p.527). We utilized a linear regression model for making our significance testing, where we used a significance level of 0.1. If the p value is less than the level of significance, then we state that there is a relationship between the variables. The linear regression model also gives us a correlation between the dependent variable and the changes in the independent variables (Saunders *et al.*, 2012, p.524). This is very important to us because we wanted to look at the nature of the relationship between different variables in order to testify the constructs in the conceptual model. There are six hypotheses in our conceptual model. For the attitude dependent variable, there are seven constructs as independent variables (see figure 6) and for the purchase intention dependent variable, there are two independent variables including attitude (see figure 6). We go beyond the bivariate regression analysis and conducted two multivariate regression analyses for the attitude and the purchase intention in our study. Criterion validity that makes it possible for the researcher to see how well the questionnaire correlate with the measures (Saunders et al., 2012, p.430). Therefore, linear regression analysis is a suitable tool for clarifying the criterion validity in this investigation.

4.7 Ethical Considerations

The importance of ethics within a research grew significantly over the scope of the past decades (Saunders et al., 2012, p. 168). It covers and consequently provides a guideline on how to address the different stages of a research (Saunders et al., 2012, p. 168). Since our research conducts human participation, Saunders et al., (2012, p. 208) mention that there are various ethical concerns and thus provides ethical guidelines for them. What

concerns did we face and how we managed ethical concerns will be described in section below.

In our case ethical guidelines refer to internet-mediated research as well as to personally administer the questionnaire. Taking in consideration Saunders et al., (2012) who suggest a responsibility when collecting data, alert to data alternation or falsification. In the process of data collection, data coding and data management we were able to fulfil this predisposition. To address Saunders et al., (2012, pp. 237-238) concern regarding gaining informed consent, we administered those ethical issues by gaining a personal agreement from participants to take part in the survey. At the time of survey design we address the issue regarding fully informed participants by providing written information about us as researchers, the purpose of the survey as well as of the study. To address Saunders et al., (2012, p.239) concerns regarding participation, we have not perceived any possible risks of taking participation and thus we did not inform about them. We were also able to ensure and maintain our privacy, only contact detail information provided to the public was our University email address and thus we avoided negative social interactions. The process of data collection from the very beginning until the very end characterised by respecting participants' privacy, they were not disturbed or observed when filling in the questionnaire. Respondents were respected and no harm was caused to them in the online environment as well as in the face-to face environment. We were able to ensure zero level of deception, due to the fact that all participants were clearly informed of the purpose of questionnaire and of our intentions. In both printed and online version of our questionnaire respondents were assured of the anonymity, no confidential data were collected. When managing data, we did not need to follow any legislation, since our self-administered questionnaire was completely anonymous (Saunders et al., 2012, p. 232). Since all our collected data were anonymous, it was easy to assure data analysis and reporting according to ethical concerns mentioned by Saunders et al., (2012, p. 245). When analysis data, we did not have any personal data we would need to handle differently, nobody was exposed to embarrassment or any sort of harm. In our data analysis part we do not specify age, gender, dates, location, names actual organisations or job positions (Saunders et al., 2012, p. 245).

Thus we can argue that ethical requirements for research were fully met and our research has been conducted under ethical constructs

5 Empirical findings & Data analysis

This chapter presents the data analysis and the result of the empirical investigation. Data collected through questionnaire were analysed via several testing in SPSS and subsequently presented via descriptive statistics, Cronbach's Alpha, Pearson Correlation and two regression analysis.

5.1 Demographics

In total 153 questionnaires were collected, out of which 103 were manually filled in, and remaining 50 questionnaires come from internet-based survey. We have targeted 600 respondents in order to reach a minimum of complete elements in our sample in during the data collection we experienced 15 refusals to fill in the questionnaire. However, Bryman & Bell (2012) suggest that there is a higher risk of low response rate with self-administered questionnaire (Bryman & Bell, 2012, p.235). In our case only 11 questionnaires were uncompleted and 5 were removed due to the age of participants that was above 55. Thus, we had 16 intangible answers in our survey (Saunders *et al.*, 2012, p.268). There were 153 fully completed questionnaires. 15 paper survey respondents and 416 internet survey respondents completely refused to fill the survey, so those 431 respondents were unreachable in our survey (Saunders *et al.*, 2012, p.268). Taking that information into the consideration, we have calculated total response rate (total number of respondents / (total number of samples - intangible)) equal to 26.2% and the active response rate (total number of respondents/(total number of samples-(intangible + unreachable))) of our study up to 100 % due to no other non-respondents in our survey (Saunders *et al.*, 2012, p.268).

In our questionnaire, we included questions regarding respondents' gender, education, income, occupation and questions regarding smart phone usage, such as a type of smart phone and exposure to mobile advertising (see Appendix 3). Table 2 shows there are 50.3 % males and 49.7 % females in our sample.

Demographics – respondents' age		
Age	Respondents	Percent
18 – 24	65	43,62
25 – 34	59	39,6
35 - 44	14	9,4
45 - 54	11	7,38
Total	153	100%

Table 2. Age spread in our sample

Demographics – respondents' gender				
Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Female	76	49,7	49,7	49,7
Male	77	50,3	50,3	100
Total	153	100	100	

Table 1 Gender spread in our sample

From review literature and our findings, we can conclude that our sample is truly representative, to achieve perfect responsiveness we would need to have data from 60% of the population (Saunders *et al.*, 2012, p.269). Additional variable age was divided into five groups 18 – 24, 25 – 34, 35 – 44, and 45 – 54 following the Think with Google (2013) division.

Based on European Commission report (2013a) that statest consumers with higher income are more likely to subscribe for mobile broad band connection. Consumers with

the highest income used twice more likely Internet-to-go than household with the lowest income (European Commission, 2013a). Based upon analysis of our collected data (see table 3) we observed similar pattern between the level of income and Internet on-the-go usage. Yet not to the same extend as European Commission, because students in our sample have the lowest income level yet belong to the most common internet-on-the-go users. Data are displayed in Table 3 and Table 4.

Do you use Internet on-the-go				
Valid	Frequency	Percent	Valid Percent	Cumulative Percent
No	39	25,5	25,5	25,5
Yes	114	74,5	74,5	100
Total	153	100	100	

Table 3. Internet on-the-go usage

Distribution of Internet on-the-go users among income groups				
Income (SEK)	Internet on-the-go users	Internet on-the-go non-users	Percentage - users	Percentage – non-users
Less than 20 000	90	31	58,82	20,26
20 000 – 29 999	12	8	7,84	5,23
30 000 – 39 999	3	0	1,96	-
More than 40 000	5	0	3,27	-
Total	149		100	

Table 4. Relationship between Income and Internet on-the-go usage

5.2 Additional findings

Exploring respondents' technical smart phones' facilities, habits and experience with smart phone advertising can be of a use for marketers and advertisers. These findings provide an overview of most common communication channels of mobile advertising, respondents' willingness to receive advertising messages, it also specifies the format of a preferred advertising message and overall customer attitudes towards mobile advertising and preferences of marketing communication channels. Both marketers and advertisers can leverage those data for their and consumers mutual satisfaction as suggested by (Ducoffe, 1995).

We asked respondents which form and via which channel they have experienced mobile advertising the most, because we believe it is valuable for marketers and advertisers to know which forms and channels have been utilized and to what level. Knowing so provide advertisers with valuable information about the visibility of their advertising messages and subsequently reveals so called window of opportunity in terms of unexploited mobile advertising forms as well as channel see table 5 and table 6.

Which form of mobile advertising have you experienced most?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Banner ads	58	37,9	37,9	37,9
	Internet browser	2	1,3	1,3	39,2
	Location based	21	13,7	13,7	52,9
	Mobile Search	8	5,2	5,2	58,2
	Mobile video	8	5,2	5,2	63,4
	None	13	8,5	8,5	71,9
	QR code	2	1,3	1,3	73,2
	SMS/MMS	41	26,8	26,8	100
	Total	153	100	100	

Table 5. Most common mobile advertising form

Where did you experience mobile advertising the most?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Apps	39	25,5	25,5	25,5
	E-mail	10	6,5	6,5	32,0
	Games	6	3,9	3,9	35,9
	Internet browsers	35	22,9	22,9	58,8
	Nowhere	6	3,9	3,9	62,7
	Social networks	50	32,7	32,7	95,4
	Video Sharing Platform	7	4,6	4,6	100
	Total	153	100	100	

Table 6. Spread of mobile advertising channels in our sample

Item is regarding respondents preferred mobile advertising forms, was included to provide beneficial information to both marketers and advertisers when planning advertising campaigns or promotional events. This item reflects upon customers' expect to be contacted through or view advertising messages at. As we could see in reviewing literature, taking customers' opinions, enhance positive attitude and credibility towards advertising message and advertiser (see table 7) (Ducoffe, 1995;MacKenzie 1989).

Which form of mobile advertising are you willing to accept the most?					
		Frequency	Percent	Valid Percent	Cumulative Percent
	Banner ads	29	19	19	19,0
	Location based	18	11,8	11,8	30,7
	Mobile Search	10	6,5	6,5	37,3
	Mobile video	6	3,9	3,9	41,2
	None	70	45,8	45,8	86,9
	QR code	8	5,2	5,2	92,2
	SMS/MMS	12	7,8	7,8	100
	Total	153	100	100	

Table 7. Consumers' preferred forms of mobile advertising

Frequency of receiving mobile advertising messages plays a role as an indicator of irritation and again can be valued by advertisers as a feedback of mobile marketing strategies. They can see customers' exposure to mobile advertising messages and thus decide whether to enhance, balance or weaken their advertising (see Table 8).

How often do you view and read mobile advertisements on a smart phone?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 per 2 – 3 days	11	7,2	7,2	7,2
	1 per 4 – 5 days	11	7,2	7,2	14,4
	1 per week	30	19,6	19,6	34,0
	1 – 3 per day	30	19,6	19,6	53,6
	More than 3 per day	24	15,7	15,7	69,3
	Never	47	30,7	30,7	100
	Total	153	100	100	

Table 8. Frequency of exposure to mobile advertising

An additional fragment of age is represented by Generation C (see Table 9) that spreads over two groups and stands for 20 respondents (13.42%).

Generation C				
Age	Frequency	Percent	Frequency of the Internet on-the-go	Income (SEK) higher than 20 000
21 - 26	80	52,29	65	9,6
Total	153	100	149	

Table 9. Spread of Generation C and internet on-the-go characteristic in our sample

5.3 Cronbach's Alpha and Descriptive Statistics

Cronbach's Alpha was used to the firstly test reliability of the collected data. Secondly, as we mentioned in the previous chapter, to secure the internal consistency of the nine constructs, as mentioned in our conceptual model. Based on the testing, we have found that eight out of nine constructs had higher than the minimum value of Cronbach's alpha (0.7) for the regression analysis (Saunders *et al.*, 2012, p. 430). Yet credibility had the value of 0.62 which is slightly below 0.7, thus, according to Saunders (2012, p. 439) credibility is not a reliable construct for the analysis. Therefore, after considering the definition of the credibility, as mention in, we decided to keep the only the closest fit survey question for the credibility analysis. We have removed one measurement question "I feel that smart phone advertising is believable" related to the credibility and considered the remaining most fitted question "I would be happier to receive mobile advertising if I liked and trusted the company" and calculated credibility construct. Which enabled us to use the credibility in the regression analysis in later? Then, we have summed up the questions related with each reliable construct and divided by the number of questions in order to calculate the constructs' values. Thus, we conclude that all constructs together in the conceptual model are close enough for performing a reliable regression analysis in this study.

Descriptive Statistics and Cronbach's Alpha			
Factors	Mean	Std. Deviation	Cronbach's Alpha
Credibility	2,68	0,99	One item
Infotainment	1,94	0,83	0,79
Incentives	2,01	1,09	0,90
Irritation	4,03	1	0,79
Attitude	1,84	0,92	0,82
Personalisation	1,85	0,87	0,83
Permission	2,44	1,17	0,86
Flow experience	3,93	0,63	0,74
Purchase Intention	1,99	0,92	0,83

Table 10. Descriptive Statistics and Cronbach's Alpha

The mean value of the factors in the conceptual model is important to understand how respondents feel and perceive different affective factors of mobile marketing (see table 10). Therefore, marketers have the possibility to make necessary actions in order to improve consumers and future consumers' conception about mobile marketing. The highest mean value is for the item irritation (4.0) and the lowest is for attitudes (1.84). Standard deviation varies between 0.63 and 1.17 for the all factors in our conceptual model. Mean value 4.03 of the irritation reveals that most of the respondents designate mobile advertising as irritating and intrusive. As we mentioned earlier, in permission-based advertising, consumers provides permission to advertisers to deliver advertising messages only about in advance chosen products and services. This is appointed as a key strategy to lessen an irritation (Tsang et al., 2004). The mean value for the personalisation is equal to 1.85 in our study, so most of the respondents don't believe mobile advertising is tailored to their usage and interest. Therefore, it is important to focus on personalisation, which success can be enhanced by request for permission rather than broadcasting advertisements to everyone. Consequently, it will decrease information overload and minimize the distraction and anonymity of advertisers. Aforementioned actions will help to raise positive attitudes towards mobile advertising. Flow experience is relatively new concept in mobile advertising, but mean value of 3.93 reveals that most respondents agree that their prior flow experience has an effect on attitudes or the purchase intention. Infotainment, incentives, attitude and purchase intention got relatively lesser mean values than the average of mean value of 2.5. Attitudes and purchase intention mean values reveal that most consumers do not perceive positive attitudes towards mobile advertising and increase the purchase of products or services after seeing such advertisements.

5.3.1 Pearson Correlations

As we mentioned in the previous chapter, a correlation test was completed in order to resolve items having the largest and the smallest impact on the conceptual model and hypotheses. Thus we calculated the average of individual items, and these were in our study personalisation and attitude. Saunders et al. (2012, p. 521) explains the valid correlation range should be between -1 and +1. Table 11 shows personalisation and attitude are the most positively correlated factors (correlation = +0.780) and least positively correlated (correlation = +0.030) items are flow experience and irritation in. Furthermore irritation and infotainment are the most negatively correlated factors (correlation = -0.622) and least negatively correlated items are irritation and permission in our study (correlation = -0.340). Pearson correlation test results indicate that almost all the correlations are significant at the significance level of 0.01 and 0.05. According to the correlation table (see table 11), increased permission, personalisation, incentives, credibility and infotainment will decrease irritation of the advertising message content.

Correlation										
		Cred.	Inf.	Irr.	Inc.	Pers.	Perm.	Att.	P.I.	F. Ex.
Credibility	Pearson Correlation	1	.552**	-.387	.523**	.520**	.600**	.564**	.508**	.301**
Infotainment	Pearson Correlation	.552**	1	-.622**	.649**	.702**	.617**	.732**	.638**	.160*
Irritation	Pearson Correlation	-.387**	-.622**	1	-.495**	-.462**	-.340**	-.500**	-.431**	.030
Incentives	Pearson Correlation	.523**	.649**	-.495**	1	.660**	.629**	.732**	.644**	.200*
Personalisation	Pearson Correlation	.520**	.702**	-.462**	.660**	1	.637**	.780**	.704**	.216**
Permission	Pearson Correlation	.600**	.617**	-.340**	.629**	.637**	1	.675**	.596**	.303**
Attitudes	Pearson Correlation	.564**	.732**	-.500**	.732**	.780**	.675**	1	.711**	.189*
Purchase Intention	Pearson Correlation	.508**	.638**	-.431**	.644**	.704**	.596**	.711**	1	.245**
Flow experience	Pearson Correlation	.301**	.160*	.030	.200*	.216**	.303**	.189*	.245**	1

** , Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed)

Table 11. Correlation

5.4 Regression analysis

In the previous chapter we have taken necessary actions to minimize the bias via accommodating different methods for survey distribution. But it is unreliable to testify the significance of the above mentioned factors due to substantially uneven sample elements in internet and paper surveys (Saunders *et al.*, 2012, pp. 517-518). Based on our theoretical framework we apply regression analysis and thus attempt to achieve goal of this thesis. Every regression is going to be revised and discussion will be built upon it. In the beginning of this chapter we have conducted Cronbach's alpha and correlation test in order to prove the reliability and the validity of the constructs in the conceptual model. Therefore, we fulfilled the prerequisites for the following two regression analyses.

5.4.1 Regression 1 - Infotainment, Incentives, Irritation, Credibility, Personalisation Permission and Flow experience effect on consumer attitudes towards mobile marketing.

In order to measure the effect between independent variables; message content (credibility, infotainment, irritation and incentives), personalisation, permission and flow experience and the dependent variable attitudes toward mobile advertising, we conducted multiple regression analysis. The 'enter' method was applied to execute aforementioned. The regression model was highly significant ($F = 56.75$; $p < 0.1$). Adjusted R-square explains the sum of independent variables (Shiu *et al.*, 2009, p. 569). For this regression analysis, the adjusted R-square was 0.72, which means that independent variables were responsible for 72% of the variance in attitudes towards mobile marketing. According to (Saunders *et al.*, 2012, p. 525), 0.5 of the adjusted R-square is an average predictor of the variation. Therefore, we can conclude that regression model 1 is a good predictor of dependent variable attitudes in this study.

The linear regression analysis results show that four out of seven predictors have significant positive effects on attitudes; infotainment ($\beta = 0.22$, $p < 0.1$), incentives ($\beta = 0.21$, $p < 0.1$), personalisation ($\beta = 0.37$, $p < 0.01$) and permission ($\beta = 0.17$, $p < 0.1$). β values ranging between -1 and +1, where 0 means no impact at all and +1 stands for

totally positive effect with the dependent variable (Hair et al., 2006). For instance, if infotainment increases by one unit, positive attitude towards mobile advertising increases by 22 %. One unit increase for the flow experience and irritation leads to increase negative attitudes towards mobile advertising by 3.6% and 2.5% respectively. But for the flow experience ($\beta = -0.036$, $p > 0.1$), irritation ($\beta = -0.025$, $p > 0.1$) as well as credibility ($\beta = 0.025$, $p > 0.1$), so those factors are not significant under this regression analysis.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.856*	.733	.720	.48463

*. Predictors: (Constant), Flow experience, Irritation, Credibility, Permission, Personalisation, Incentives, Infotainment

Table 12. Summary Attitudes towards mobile advertising and predicted items

ANOVA**						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	93.297	7	13.328	56.748	.000*
	Residual	34.055	145	.235		
	Total	127.352	152			

*. Predictors: (Constant), Flow experience, Irritation, Credibility, Permission, Personalisation, Incentives, Infotainment

**. Dependent Variable: Attitudes

Table 13. Regression 1: ANOVA

Coefficients*						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.194	.354		.548	.584
	Credibility	.025	.033	.038	.755	.451
	Infotainment	.220	.080	.200	2.734	.007
	Irritation	-.025	.052	-.028	-.484	.629
	Incentives	.210	.054	.251	3.879	.000
	Personalisation	.372	.070	.360	5.324	.000
	Permission	.113	.050	.145	2.250	.026
	Flow experience	-.036	.068	-.025	-.537	.592

*. Dependent Variable: Attitudes

Table 14. Regression 1: Coefficients

5.5 Regression 2- Attitudes and Flow experience effect on purchase intention.

Regression 2 addresses the effect of the independent variables; attitudes and flow experience and the dependent variable purchase intention. The regression 2 is significant ($F = 80.51$; $p < 0.1$). The adjusted R-square was 0.511; therefore independent variables were responsible for 51.1% of the variance in purchase intention. According to Saunders et al., (2012) 0.5 of R-square is an average predictor of the variation (Saunders et al., 2012, p. 525). Therefore, we can conclude that regression 2 is slightly better than an average predictor of dependent variable purchase intention in this study. The linear regression analysis results show that both predictors have significant positive effects on purchase intention; attitudes ($\beta = 0.691$, $p < 0.1$) and flow experience ($\beta = 0.168$, $p < 0.1$). β values reveal that one unit increase for the attitudes and flow experience leads to increase purchase intention by 69.1% and 16.8% respectively.

Model Summary						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1			.720 ^a	.518	.511	.64234

*. Predictors: (Constant), Flow experience, Attitudes

Table 15. Summary Flow experience and Purchase Intention

ANOVA**						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	66.438	2	33.219	80.512	.000*
	Residual	61.889	150	.413		
	Total	128.327	152			

*. Predictors: (Constant), Flow experience, Attitudes

**. Dependent Variable: Purchase Intention

Table 16. Regression 2. ANNOVA

Coefficients*									
Model				Unstandardized Coefficients		Standardized Coefficients	t	Sig	
				B	Std. Error	Beta			
1	(Constant)	.060	.332					.180	.858
	Attitudes	.691	.058	.689				11.929	.000
	Flow experience	.168	.084	.115				1.994	.048
*. Dependent Variable: Purchase Intention									

Table 17. Regression 2: Coefficients

6 Discussion

This chapter discusses findings of our research. Each regression will be explained from the perspective of significant effects. In this section we will also state which hypotheses were supported. Our conceptual framework will be presented and discussed in its modified version.

In relation to previous research, the studies conducted by Korzaan (2003), Ünal et al., (2011) and Kim & Han (2014) are mainly considered when we build our conceptual model. We used their scales, most of their survey questions and hypotheses in this study. Data collection methods, sampling techniques, considered sample population and significant levels also similar to our study. Therefore, we are going to consider above studies in order to compare regression analysis results of this study. A study conducted by Haghirian&Madlberger (2005) reveals that there is a significant positive effect of advertising value on consumer attitudes. In other studies except the study of Haghirian&Madlberger (2005) distinction between advertising value and attitudes is not clear. We have considered incentive as part of the message content in this study and identified the relationship with attitude rather than advertising value. Kim & Han (2014) show that incentives have a significant positive effect on advertising value. Thus, we can't directly compare the incentive relationship with the results of Kim & Han (2014). But there is a possibility to generally compare with the said study due to the positive relationship between advertising value and attitudes found in the Haghirian&Madlberger (2005) study.

6.1.1 Regression 1- Infotainment, Incentives, Irritation, Credibility, Personalisation Permission and Flow experience effect on consumer attitudes towards mobile marketing.

Credibility has no significant effect on attitudes in our study but findings of Ünal et al., (2011) and Kim & Han (2014) studies show positive relationship with advertising value. This result reflects that Swedish people may perceive higher trust about their mobile advertisers compared to Turkish and South Korean people in general. In the studies of Ünal et al., (2011) and Kim & Han (2014) entertainment and informativeness were positively significant towards advertising value. In this study combined effect of entertainment and informativeness considered as infotainment and we got highly significant positive effect towards consumer attitudes in the regression analysis 1. Therefore, we can generally conclude that advertisers make pleasing advertisements which consist of up to date and relevant product/service information will positively influence to the consumer attitudes in mobile marketing. There was no significant negative effect of irritation towards attitudes in this study. This relationship is comply with the findings of Kim & Han (2014) effect of irritation towards advertising value but Ünal et al., (2011) found a significant negative relationship between irritation and advertising value. As we mentioned in a previous chapter, prior permission is obligatory before an advertising activity in Europe. Previous research has shown permission based marketing decreases the irritation of the consumers. Therefore we can conclude that Swedish people are less irritated by mobile advertisement, so the irritation has no significant negative relationship with consumer attitudes. Incentives positively significant with attitudes and comply with Kim & Han (2014) findings of incentives and advertising value relationship. Therefore, we can assume that financial benefits such as exclusive mobile discounts, rewards and gifts play a significant role in attracting Swedish customers towards mobile advertising.

Ünal et al. (2011) found significant positive relationships of personalisation and permission towards attitudes, which is supported in this study as well. Flow experience was not significant towards attitudes in our study. Subsequently, the result was not complying with Korzaan (2003) regression analysis findings. We believed the flow experience is more related with consumer online behaviour rather than their attitudes towards mobile advertising. Therefore, we have testified the effect of flow experience and purchase intention in the next regression analysis.

Regression 1 provided empirical evidence regarding following predicted hypotheses.

H1: a) Perceived infotainment, b) credibility and c) incentives of mobile advertisements have positive effects, while d) irritation has a negative effect on consumer attitudes towards mobile advertising.

The regression analysis showed that hypothesis H1a is supported, hypothesis H1b is not supported, hypothesis H1c is supported and hypothesis H1d is not supported.

H2: The personalisation of mobile advertisements is positively associated with attitudes towards mobile advertisements. The findings indicate that hypothesis H2 is supported.

H3: The permission-based mobile advertisements are positively associated with attitudes towards mobile advertisements. The findings indicate that hypothesis H3 is supported.

H4: Flow experience of mobile advertisements is positively associated with attitudes towards mobile advertisements. The findings indicate that hypothesis H4 is not supported.

According to the regression analysis 1 results, an advertisement that comprising infotainment, incentives and its being sent with permission and personalized according to consumer interests has a positive effect on creating attitudes towards mobile advertisements.

6.2 Regression 2 - Attitudes and Flow experience effect on purchase intention

In the studies of Ünal et al., (2011) and Korzaan (2003), attitudes were the key determinant of purchase intention, but Kim & Han (2014) has proved advertising value and flow experience are the key determinants of consumer purchase intention. Our regression analysis results reveal that attitudes and the flow experience are the key determinants of consumer purchase intention on smart phones. In general, positive attitudes are the main driving force that motivates someone to perform a particular task. As such, consumer attitudes towards mobile marketing play the major role in escalating their purchase intention. Furthermore, flow experience plays a significant role on consumer purchase intention, although the said factor is rarely testified in the previous studies. Regression 2 provided empirical evidence regarding following predicted hypotheses.

H5: Consumer attitude towards mobile advertisements is positively associated with consumer purchase intention. The findings indicate that hypothesis H5 is supported.

H6: Flow experience of mobile advertisements is positively associated with consumer purchase intention. The findings indicate that hypothesis H6 is supported.

This result states that when customers perceive smartphone advertisements to be matched with their personality, interests and provide an opportunity to find the best products for updated prices, then they experience flow in the advertisement and increase the intention to purchase goods or services.

6.3 Revised conceptual model

Regression analysis helped us to differentiate supportive and non-supportive factors in the conceptual model. Supportive relationships have marked as blue arrows for the regression 1 and brown arrows for the regression 2 in the revised conceptual model while non-supportive ones not connected by arrows to their dependent variable. Incentives and personalisation had strongest effects and permission had a stronger effect towards attitudes in the regression analysis 1. Attitudes were the highest significant factor and flow experience was the least significant factor towards purchase intention in the regression analysis 2. We conclude that Flow experience had nearly the highest mean value in descriptive statistics and it was successfully significant in the regression analysis 2 and personalisation and attitudes had the least mean values but highly significant in the regression 1 and regression 2 respectively.

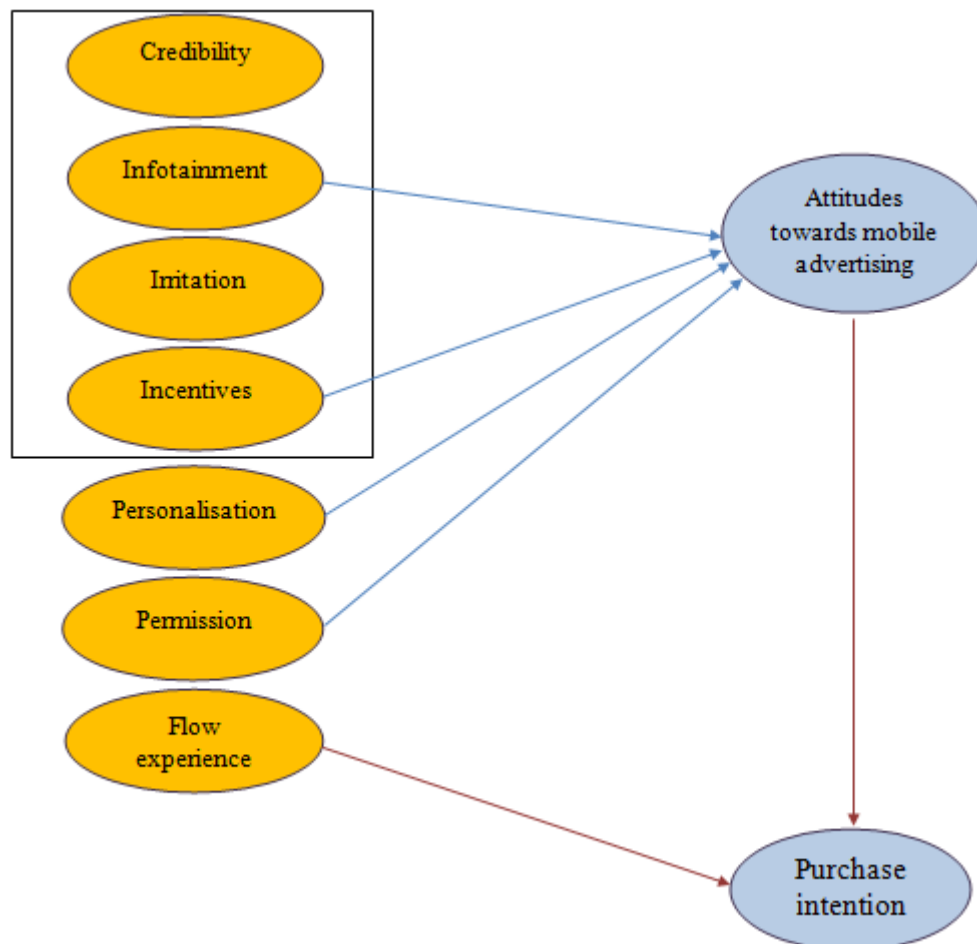


Figure 5. Revised Conceptual Model

7 Conclusion and Recommendations

Based on the discussion in the previous chapter, in this chapter, we will draw conclusion and provide theoretical and managerial implications. We will also assess our study based on four criteria of truth. At the end of this chapter we will provide suggestions for future research.

7.1 General Conclusions

Our intentions through this thesis were to develop theoretical and practical contribution to the existing research in the field of marketing and mobile advertising in particular. Our research question was stated as follows: *What is the impact of advertising message personalisation, permission, and flow experience on attitude towards mobile advertising? What is the effect of attitude towards mobile advertising and flow experience on purchase intention of Swedish customers?*

As we mentioned earlier, the purpose of this thesis was to investigate the impact of message content and flow experience on attitude towards mobile advertising, as well as to investigate what effects do attitudes toward mobile advertising have on customers purchase intention indicated. However, it has been stated by previous studies consumers in general have negative attitudes towards mobile advertising in our study we could have observe the same pattern among all age groups, various employment statuses and income levels. Yet during our work we examined the influential factors towards attitudes and how attitudes and flow experience relate to purchase intention. In our regression analysis, we have found that infotainment is highly significant towards consumer attitudes and thus prove previous research studies by Ünal et al., (2011) and Kim & Han (2014). The mean value for the personalization is equal to 1.85 in our study, so most of the respondents don't believe mobile advertising tailored to their usage and interest.

Thus we were able to answer our research question and provide some practical suggestions to improve consumer attitudes towards mobile advertising and purchase intention. Additionally our research has strengthen arguments of previous market as well as academic research in terms of need for well though through mobile marketing campaigns possessing attributes of incentives, personalisation, permission and entertainment.

7.2 Theoretical Contribution

In order to analyse collected data, two regression analysis were performed. Based on regression one analysis we can say that advertising message content attributes such as infotainment and incentives had positive effects on customers' attitude towards mobile advertising.

Firstly, the study shows that incentives play a significant role in mobile advertising acceptance. The more interesting incentives, the more of incentives and if incentives of monetary means have a positive effect on customers' attitudes towards mobile advertising. Consequently, leading consumers to accept advertisement more likely if incentives are attached. Thus, it increases the likelihood of purchase intention of the consumers. The mentioned relationships between factors in the revised conceptual model is comply with the theory of reasoned action. Fishbein & Ajzen (1975) model proved by the investigation of the relationship between attitudes towards mobile

advertising and purchase intention. This we consider as an additional theoretical contribution to this study.

Secondly, as it has been proven by this study personalized advertising messages sent prior permission are the most positively likely accepted. The statistical analysis results further show that infotainment, incentives, personalisation and permission have significant positive relationships with attitudes. Through our work, we observed that attitudes as an independent variable and flow experience have significant positive relationships with purchase intention. That is in line with Ducoffe advertising value theory (1995). Yet a new theoretical concept was developed regarding irritation, that has no effect upon attitudes towards mobile advertising. Such a statement is in contradiction with previous studies of Ducoffe (1995, 1996) and Ünal et al., (2011) and thus, we consider it as a new finding based on our study.

Thirdly, this research also helped us to identified areas for an improvement in terms of flow experience and its attributes. In our study, we could observe that customers do not experience the flow experience to the same level when engaging with mobile advertisement on smartphone as if they would do when surfing an internet via desktop. However, atmospheric cues that are related to flow experience plays a significant role in customers' purchase intention after seen the mobile advertisement. Through our study, we have proved that incentives, infotainment, permission and personalisation had positive effects on attitudes towards mobile advertising. The attitudes towards mobile advertising and flow experience had positive effects on purchase intention.

Practical Implications

According to our study, permission is a significant factor in relation to consumer attitudes. Therefore, marketers can increase the likelihood of purchase and credibility of their brand if they perform mobile advertisement based on permission. Meaning marketers shall engage in more personal and individual communication with customers one at a time and as a result gain permission for further commercial communication. Consequently a strong implication can be drawn that if advertiser invest time in personalisation study of their customers, consequently target their customers with appropriated messages the advertisers together with marketers can increase the likelihood customers providing permission more or less based on a good worthy previous experience. Advertising messages sent upon permission will directly affect consumer attitudes towards mobile advertising and increase the consumer purchase intention. Through our data analysis, we observed that the incentives are a highly significant factor towards consumer attitudes. Therefore, any form of incentives offered via smartphone would be a better option to attract customers towards mobile advertising. Incentives can be in a form of vouchers, free samples, gifts anything that customer perceive as a value.

Flow experience is a relatively new concept in mobile advertising, yet it turned out to be a very important factor in this study. Since the mean value of flow experience (3.93) reveals that most respondents agree that their prior flow experience has a major effect on their online behaviours. Therefore, we would suggest advertisers to focus on indicators related to flow experience such as attributes of atmospheric cues design, layout, balance between informativeness and entertainment, that is determined by cultural background of customer. Another important factor in case of navigability,

information finding capability and robustness of the web pages since flow experience has a significant effect on consumer purchase intention in our study.

To address a decreasing trend in purchase intention after seeing the mobile advertisements among Swedish consumers, we suggest to marketers and advertisers to focus on permission, personalisation, infotainment and incentives to enhance consumer attitudes towards mobile advertising that would consequently lead into an increase in purchase intention.

In this way we tried to make sure we can draw a general conclusion of our findings in relation to considered population in Umeå. Since Umeå municipality is considered to be a small with high percentage of young adults, we believe that our study is appropriate to replicate in other student cities similar to Umeå in their size (for example Västerås, Jönköping, Lund). The underlying reason is that in larger municipalities, there may not be a substantial difference between young and adult population.

7.3 Truth Criteria

Here we are presenting the information about reliability, validity, generalizability and replicability in order to prove that our thesis meets the truth criteria.

Reliability indicates the consistency of a measure of a concept and “internal reliability involves correlating the responses to questions in the questionnaire with each other” (Saunders *et al.*, 2012, p. 430). We have conducted a Cronbach’s Alpha test for the each construct in our conceptual model in order to measure the internal reliability. Eight out of nine constructs had higher than the minimum value of Cronbach’s alpha (0.7) for the regression analysis (Saunders *et al.*, 2012, p. 430). Yet credibility had slightly below the minimum requirement of Cronbach’s Alpha value of 0.7. Therefore, after considering the definition of the credibility, we decided to keep the only the closest fit survey question for the analysis and measured credibility using one item. Thus, we assured the questions in our survey are valid and the combined questions related to a construct in the conceptual model are measuring what it intended to measure.

Saunders states that “clear wording of the questions using familiar and easily understandable terms, respondents can improve the content validity of the questioner” (Saunders *et al.*, 2012, p. 432). When we were designing the questionnaire, pre tested respondents’ feedback about understandability, clarity and the layout of the questionnaire was taken into consideration and questions were relevantly amended. Thus, we ensured the content validity of the questionnaire. Criterion validity that makes it possible for the researcher to see how well the questionnaire correlate with the measures (Saunders *et al.*, 2012, p. 430). Therefore, we have used linear regression analysis as a suitable tool for clarifying the criterion validity in this investigation and found some interesting relationships explained in the figure 7.

According to Bryman & Bell (2011, p. 164), generalizability implies that the applicability of a study of the non-respondents within the considered population. There is a possible bias in the sampling due to different distribution methods of the survey. But we have collected a simple random sample in different physical locations and online in order to fully represent the considered population in Umeå. Therefore, we have higher possibility to generalize the findings to the considered population in Umeå.

Umeå municipality is considered to be a small and one of the high younger generation living municipalities in Sweden. Therefore, we believe that the findings of this study are appropriate to replicate in similar kind of Swedish municipalities (e.g. västerås). It is not advisable to replicate this study in larger municipalities due to different age distribution patterns in the population.

7.4 Limitations

Several concerns regarding self-administered questionnaire should be raised. At first we assumed that everybody has a smart phone, such an assumption was negatively perceived by respondents who would welcome to have additional question stated like: “Do you have a smart phone?”. We would like to address such a concern that respondents were inquired for willingness to participate in the survey, verbal and written questions regarding time;length; the approach and meaning were raised and adequately addressed. Thus self-administered questionnaire was handed out only to those owning and using smart phone and at the same time willing to participate. Such an approach allowed us to perform a survey effectively, efficiently and keeping costs low. Other concern raised by respondents was missing option “other” in question regarding their gender. We understand the complex social and theoretical background, yet at the level of bachelor thesis, we decided to follow the traditional design of previous marketing studies. All applied question regarding gender in the same manner. Such an approach helped them as well as to us to draw a basic understanding to consumer behaviour and attitudes. When conducting a study with more specific sample group, or when focusing on specific behavioural pattern, we will apply additional theories and option in the survey.

Limitation of our study and its context is its generalisation. If we would have focused on one factor influencing attitudes towards mobile advertising we could have developed more specific guidelines for marketers and advertisers. Yet this limitation should be accepted due to the fact of lack of research regarding Swedish customers and their attitudes towards mobile advertising.

However Rohm et al., (2011), Mazaheri (2013) described and prove the importance of cultural background in relation to attitudes towards mobile advertising; we have not investigated respondents’ nationality for two reasons. Addressing such a concern well would include in depth study of personal belongings to culture of first, second and third generation of foreigners living in Sweden. We believe cultural background is an important factor to take in consideration, yet to analyse it in a good and sufficient manner we would need additional time. Thus, once more time, when conducting studies with focus on a specific target group we will include additional theories and questions.

7.5 Suggestions for future research

The vast majority of academic research proves negative attitude towards mobile advertising, therefore our suggestion for further research is to put trust building strategies in focus and answer so frequently asked questions “*how*” and provide marketers with an applicable frameworks. How to build a trustworthy relationship with customers via mobile devices, so they will be more open towards mobile advertising and m-commerce, how to remove perceived risk of privacy, usage of customers personal information and data sharing. As Jayawardhena et al., (2008) describes there is a common unwillingness among marketers to adopt mobile marketing strategies,

because of lacking reassurance that customers are reluctant to participate (Jayawardhena et al., 2008).

Future research regarding the flow experience as well as atmospheric cues is inevitable in order to increase a purchase intention. Flow experience proves to be highly significant in our study and thus managerial recommendation and contribution would help to marketers as well as advertisers to develop relationship-marketing of a high quality.

Cultural background and its effect on smartphone users in terms of message content (credibility, infotainment, irritation, and incentives), personalisation, permission, perceived risk, usage, online habits and flow experience would provide marketers with valuable data to understand their consumers' needs of the flow experience. Such a research would lead into more effective and efficient marketing strategies.

Leveraging multichannel communication concept, as mentioned in the Introduction chapter of this thesis, would enhance the relationship building process as well as increase advertisers' credibility attitudes and potentially purchase intention among consumers.

Future research could combine new trends and changes in the society regarding gender issues addressed by analysis of independent sample t test and age group difference analysis by a chi-square test would be interesting to see in a conceptual model. These will help to target various segments of consumer groups after identifying their preferences and attitudes towards mobile advertising.

Youth adults regarding their income engage in online behaviour via their smartphone. Such a finding of our analysis indicates that there are significant differences in perception of online and mobile behaviour compared to previous generation X. Groups belonging to so called generation C should be a topic of future research from the perspective of their need for connectivity, content creation, and content control. We suggest future research could focus on the age group 12 – 18, that are going to be the future consumers of marketers and advertising messages.

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9 Appendix

Appendix 1. Table of Measured Items

Constructs	Measurement items	References
Credibility	I feel that smartphone advertising is believable I would be happier to receive mobile advertising if I liked and trusted the company	Kim et al., (2014) Watson et al., (2013)
Infotainment	I feel mobile advertising is fun to see I feel mobile advertising is pleasing I feel mobile advertising is of up to date and relevant products or services information	Unal et al., (2011) Liu et al., (2011) Kim et al., (2014)
Incentives	I am satisfied to get mobile advertisements that offers rewards I am willing to receive mobile advertisements when it offers rewards I respond to mobile advertising in order to receive rewards	Unal et al., (2011) Unal et al., (2011) Unal et al., (2011)
Irritation	I feel mobile advertising is annoying I feel mobile advertising is intrusive	Unal et al., (2011) Kim et al., (2014)
Attitudes towards mobile advertising	I feel mobile advertising helps raise our standard of living I feel mobile advertising helps me to find products or services that match my personality and interests I feel mobile advertising helps me to buy the best product for given price	Liu et al., (2011) Liu et al., (2011) Liu et al., (2011)
Personalisation	I feel mobile advertisement is tailored for my usage I feel mobile advertisement is personalized according to my best interests I use personalized mobile advertising as a reference for purchasing	Kim et al., (2014) Unal et al., (2011) Unal et al., (2011)
Permission	I feel mobile advertisement is trustworthy, once sent by getting my permission I feel satisfied with mobile advertising that is sent by getting my permission	Unal et al., (2011) Unal et al., (2011)
Flow experience	I completely concentrate on mobile advertising while I look at them When I browse Internet via my smartphone, I like the site to be easy to navigate When I browse Internet via my smartphone, I like to find relevant information easily. When I browse Internet via my smartphone, I like information on web sites to be well organized When I browse Internet via my smartphone, I like the robustness of the web interface When I browse Internet via my smartphone, I like to scroll to view pages	Kim et al., (2014) Cho et al., (2003) Cho et al., (2003) Cho et al., (2003) Zhang et al., (1999) Zhang et al., (1999)
Purchase intention	I expect to use mobile advertising to purchase after receiving it I would probably buy goods or services with smartphone advertisements I would consider purchasing goods or services with smartphone advertisements	Unal et al., (2011) Kim et al., (2014) Kim et al., (2014)

Appendix 2. Landing Page

HELP UMEÅ UNIVERSITY STUDENTS COMPLETE THEIR THESIS & RECEIVE VALUABLE DATA IN RETURN



Yes! I am interested in surveying Umeå customers.

Name *

Email *

SEND

Umeå has been our home for the past 3 years. Now we would like to give something back. If you are interested in knowing more about mobile advertising and customer attitudes towards mobile advertising, please come back to us.

We can collect the data in one or several ways:

1. Questionnaire at your store

2. Questionnaire on your Facebook page

3. Questionnaire on your Twitter page

4. Promotional Event in Umeå


SWEDEN SMARTPHONE USAGE



Category	Percentage
89% of Women age between 25-34 have a smartphone	89%
62.5% of women purchase products or services online	62.5%
89% of men age between 35-44 have a smartphone	89%
51% of men purchase products or services online	51%

"Mobile marketing has a great future in Sweden. Customers at this moment are ready and even willing to engage with brands and companies in their "mobile life"."

Pie-charts are based upon data withdrawn from Google (Our Mobile Planet, 2013).

Appendix 3. Survey

Original English survey

Mobile marketing and its effect on consumer purchase Intention

Thank you for your interest to participate in our study. We are two business students completing bachelor's degree at Umeå University. The main purpose of this study is to understand consumer preferences and attitudes towards mobile marketing. We would like to highlight that our survey is completely anonymous and you will not be asked to provide any confidential information about yourself. Your participation might take 10 – 15 minutes. For further information, please do not hesitate to contact us at: maku0029@student.umu.se.

Yours Sincerely,
Jana Vasickova and
MadawaAbeywickrama

*** Required**

Demographics Questions

1. Age?

2. Gender*

1. Male
2. Female

3. What is your highest completed level of education?*

1. High school graduate, diploma or similar
2. Technical or vocational training diploma
3. Bachelor's degree
4. Masters degree
5. Doctorate degree

4. What is your monthly income? *

1. Less than 20000 SEK
2. 20000 - 29999 SEK
3. 30000 - 39999 SEK
4. More than 40000 SEK

Svensk översättning av undersökningen

Mobil marknadsföring

Tack så mycket för er medverkan i vår undersökning. Vi är två affärsstudenter som håller på att avsluta vår kandidatexamen på Umeå universitet. Huvudsyftet med denna undersökning är att få en förståelse för konsumenters inställning och attityd till mobilmarknadsföring. Vi vill understryka att undersökningen är helt anonym och du behöver inte lämna någon konfidentiell information om dig själv. Frågorna tar 10-15 minuter. För ytterligare information, tveka inte att kontakta oss på email: maku0029@student.umu.se.

Med vänliga hälsningar,
Jana Vasickova och Madawa
Abeywickrama

*** Krävs**

Demografi frågor

1. Ålder

2. Kön *

1. Man
2. Kvinna

3. Vad är din högsta, avslutade utbildning? *

1. Gymnasiet
2. Yrkesutbildning
3. Kandidatexamen
4. Masterexamen
5. Doktorandexamen

5. What is your current employment status? *

1. Employed or self employed
2. Unemployed
3. Student

4. Retired
5. Other

6. What type of the smart-phone do you use? *

1. iPhone
2. Android
3. Windows Mobile
4. Other

7. Do you use Internet on-the-go? *

1. Yes
2. No

8. Which form of mobile advertising have you experienced most? *

1. SMS/MMS
2. Banner ads
3. QR code
4. Mobile video
5. Mobile search
6. Location based (Geo targeting)
7. None

9. Where did you experience mobile advertising the most? *

1. Apps
2. Games
3. Video sharing platform
4. E-mail
5. Social networks
6. Internet browsers
7. Nowhere

1. 30000 - 39999 SEK
2. More than 40000 SEK

5. Vilken är din nuvarande anställningsform? *

1. Anställd eller egen företagare
2. Arbetslös
3. Student
4. Pensionär
5. Annat

6. Vad för sorts smart phone använder du? *

1. iPhone
2. Android
3. Windows mobile
4. Annat

7. Använder du Internet on-the-go? *

1. Ja
2. Nej

8. Vilken sorts mobil marknadsföring har du upplevt mest? *

1. SMS/MMS
2. Bannerannonser
3. QR-koder
4. Reklamfilm på mobilen
5. Mobilsökning
6. Platsbaserad reklam
7. Ingen

9. Var har du upplevt mobil marknadsföring mest? *

1. Appar
2. Spel
3. Videodelning plattform
4. Email
5. Sociala nätverk
6. I webbläsare
7. Ingenstans

10. Which form of mobile advertising are you willing to accept the most? *

1. SMS/MMS
2. Banner ads
3. QR code
4. Mobile video
5. Mobile search
6. Location based (Geo targeting)
7. None

11. How often do you view and read mobile advertisements on a smart phone? *

1. 1 per week
2. 1 per 4-5 days
3. 1 per 2-3 days
4. 1-3 per day
5. More than 3 per day
6. Never

10. Vilken sorts mobil marknadsföring är du mest villig att acceptera? *

1. SMS/MMS
2. Bannerannonser
3. QR-koder
4. Reklamfilm på mobilen
5. Mobilsökning
6. Platsbaserad reklam
7. Ingen

11. Hur ofta ser och/eller läser du reklam på en smart phone? *

1. 1 gång i veckan
2. 1 gång per 4-5 dagar
3. 1 gång per 2-3 dagar
4. 1-3 gånger per dag
5. Mer än 3 gånger per dag
6. Aldrig

Scale items

5-point Scale; 1 – Strongly Disagree, 5 – Strongly Agree

Message Content

12. I feel that mobile advertising is believable *
13. I would be happier to receive mobile advertising if I liked and trusted the company *
14. I feel mobile advertising is fun to see *
15. I feel mobile advertising is pleasing *
16. I feel mobile advertising is of up to date products or services information *
17. I am satisfied to get mobile advertisements that offers rewards *
18. I am willing to receive mobile advertisements when it offers rewards *
19. I respond to mobile advertising in order to receive rewards *
20. I feel mobile advertising is annoying *
21. I feel mobile advertising is intrusive *

Meddelande innehåll

12. Jag tycker att mobil marknadsföring är trovärdig. *
13. Jag vill hellre få mobilreklam från ett företag jag gillar och litar på. *
14. Jag tycker att mobilreklam är rolig att se på. *
15. Jag tycker att mobilreklam är tillfredställande. *
16. Jag tycker att mobilreklam ger information om aktuella produkter och tjänster. *
17. Jag är nöjd om jag får mobilreklam som erbjuder belöningar. *
18. Jag är villig att få mobilreklam om den erbjuder belöningar. *
19. Jag svarar på mobilreklam för att få belöningar. *
20. Jag tycker att mobilreklam är irriterande. *
21. Jag tycker att mobilreklam är påträngande. *

Consumer attitudes towards mobile marketing

- 22. I feel mobile advertising helps raise our standard of living *
- 23. I feel mobile advertising helps me to find products or services that match my personality and interests *
- 24. I feel mobile advertising helps me to buy the best products or services for given price *
- 25. I feel mobile advertisement is tailored for my usage *
- 26. I feel mobile advertisement is personalized according to my best interests *
- 27. I use personalized mobile advertising as a reference for purchasing *
- 28. I feel mobile advertisement is trustworthy, once sent by getting my permission *
- 29. I feel satisfied with mobile advertising that is sent by getting my permission *

Internet browsing via smart-phone

- 30. I completely concentrate on mobile advertising while I look at them *
- 31. When I browse Internet via my smart phone, I like the site to be easy to navigate*
- 32. When I browse Internet via my smart phone, I like web sites to provide relevant information*
- 33. When I browse Internet via my smart phone, I like information on web sites to be well organized *
- 34. When I browse Internet via my smart phone, I like the robustness of the web interface *
- 35. When I browse Internet via my smart phone, I like to scroll to view pages *

Konsumenternas inställning till mobil marknadsföring

- 22. Jag tycker att mobilreklam hjälper till att höja vår levnadsstandard. *
- 23. Jag tycker att mobilreklam hjälper mig att hitta produkter eller tjänster som matchar minpersonlighet och intressen. *
- 24. Jag tycker att mobilreklam hjälper mig att köpa de bästa produkterna eller tjänsterna för debästa priserna. *
- 25. Jag tycker att mobilreklam är skräddarsydd för min användning. *
- 26. Jag tycker att mobilreklamen jag ser matchar mina personliga intressen. *
- 27. Jag använder mobilreklam som referens när jag köper saker. *
- 28. Jag tycker att mobilreklam är trovärdig, när jag gett mitt medgivande. *
- 29. Jag är nöjd med mobilreklam som skickas till mig med mitt medgivande. *

Internetsurfande med smart phone

- 30. Jag koncentrerar helt och hållet på mobilreklam när jag tittar på den. *
- 31. När jag surfar på min smart phone vill jag att websidorna ska vara lätta att navigera på. *
- 32. När jag surfar på min smart phone vill jag att websidorna ska visa relevant information. *
- 33. När jag surfar på min smartphone vill jag att websidorna ska vara välorganiserade. *
- 34. När jag surfar på min smart phone vill jag att sidorna skall vara robusta, dvs tolereramisstag från användare samt ha lågt antal buggar. *

35. När jag surfar på min smart phone tycker jag om att scrolla för att se sidor. *

Purchase intention

12. I expect to use mobile advertising to purchase after receiving it *
13. I would probably buy products or services with smart phone advertisements *
14. I would consider purchasing products or services with smart phone advertisements *

Köpavsikter

36. Jag förväntar mig att köpa en produkt från mobilreklam efter att ha sett den. *
37. Jag skulle förmodligen köpa produkter eller tjänster som jag sett på mobilreklam. *
38. Jag skulle kunna tänka mig att köpa produkter eller tjänster som jag sett på mobilreklam. *



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